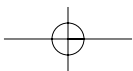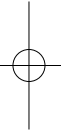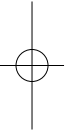# The Good Supervisor

www.skills4study.com – the leading study skills website

Palgrave Study and Research Skills

Authoring a PhD
Business Degree Success
Career Skills
Critical Thinking Skills (2nd edn)
Cite them Right (8th edn)
e-Learning Skills (2nd edn)
Effective Communication for Arts and Humanities
  Students
Effective Communication for Science and Technology
The Exam Skills Handbook (2nd edn)
The Foundations of Research (2nd edn)
The Good Supervisor (2nd edn)
Great Ways to Learn Anatomy and Physiology
How to Manage your Arts, Humanities and Social Science
  Degree
How to Manage your Distance and Open Learning Course
How to Manage your Postgraduate Course
How to Manage your Science and Technology Degree
How to Study Foreign Languages
How to Study Linguistics (2nd edn)
How to Use your Reading in your Essays
How to Write Better Essays (2nd edn)
How to Write your Undergraduate Dissertation
Information Skills
The International Student Handbook
IT Skills for Successful Study
Making Sense of Statistics
Mastering Practical Grammar
The Mature Student's Guide to Writing (2nd edn)
The Mature Student's Handbook
The Palgrave Student Planner
The Personal Tutor's Handbook
The Postgraduate Research Handbook (2nd edn)

Presentation Skills for Students (2nd edn)
The Principles of Writing in Psychology
Professional Writing (2nd edn)
Research Using IT
Researching Online
Skills for Success (2nd edn)
Structuring Your Research Thesis
The Student Life Handbook
The Student's Guide to Writing (2nd edn)
The Study Abroad Handbook
The Study Skills Handbook (3rd edn)
Study Skills for International Postgraduates
Study Skills for Speakers of English as a Second
  Language
Studying Arts and Humanities
Studying the Built Environment
Studying Business at MBA and Masters Level
Studying Economics
Studying History (3rd edn)
Studying Law (3rd edn)
Studying Mathematics and its Applications
Studying Modern Drama (2nd edn)
Studying Physics
Studying Programming
Studying Psychology (2nd edn)
Teaching Study Skills and Supporting Learning
The Undergraduate Research Handbook
The Work-Based Learning Student Handbook
Work Placements – A Survival Guide for Students
Writing for Engineers (3rd edn)
Write it Right
Writing for Law
Writing for Nursing and Midwifery Students (2nd edn)

Pocket Study Skills

Series Editor: Kate Williams

14 Days to Exam Success
Blogs, Wikis, Podcasts and More
Brilliant Writing Tips for Students
Completing Your PhD
Doing Research
Getting Critical
Planning Your Essay

Planning Your PhD
Reading and Making Notes
Referencing and Understanding Plagiarism
Science Study Skills
Success in Groupwork
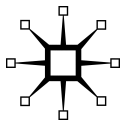Time Management
Writing for University

The Good Supervisor

Supervising Postgraduate and Undergraduate Research for Doctoral Theses and Dissertations

2nd edition

Gina Wisker

Contents

Acknowledgements

viii   The Good Supervisor
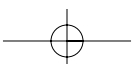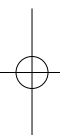
1 Introduction

This is the second edition of *The Good Supervisor*, updating the first edition (2005), a book built on research and experience, which I am pleased to learn has been an essential text for many supervisors (and also research students). Since the first edition of this book was finished in 2004 and published in 2005, supervision has become an extremely topical issue and one which is now significantly more research-informed, considered from a diverse range of angles and issues, and firmly embedded as a development activity in universities worldwide. This new edition moves beyond the first edition and beyond several other books on the market which provide 'advice' to supervisors, in ensuring that there is a firm research base both in my own UK and international research, and in that of UK and international colleagues. The research base makes the most of my own and close colleagues' research and practice in supervision, and postgraduate research learning. Further insights have been provided by supervisors with whom I have worked at conferences, notably at the Quality Postgraduate Research conferences in Adelaide, the postgraduate supervision conferences at the University of Stellenbosch, and in workshops at, among others, the Universities of Gothenberg, Griffith, Bergen, the Ontario Institute for the Study of Education (OISE) in Toronto, Royal College of Agriculture, Chichester, Tasmania, the Australian National University (ANU), Auckland, and many others. The literature of supervision has expanded vastly over this period also, so this new edition has an up-to-date secondary research base in the literature which informs our thoughts about and suggestions for good supervision more generally. The established and continually developing research and literature looks at a range of established and some newer issues informing supervision, including academic identities, international student learning, cross-cultural supervision, engaging with critical and indigenous methodologies, student resilience and wellbeing, and postgraduate learning and learner practices, particularly in the context of theorising ways we can support or 'nudge' students to work at sufficient conceptual, critical and creative levels and which exceeding the demands of their award. This latter focus on learning

is underpinned by threshold concept theory (Meyer and Land, 2005) and our own conceptual threshold crossing theory (Wisker, Robinson and Kiley, 2008).

Supervision is in many ways the pinnacle of an academic's engagement with his or her university in terms of the unique mix of teaching, learning and research which it offers. Many of us begin by supervising undergraduate dissertations and projects, then master's and PhD, PrD, EdD, etc. students and research projects for groups of postdocs. Research as a form of learning which values the creation and contestation of knowledge has become central to curricula worldwide. Specifically, since 2004, the focus in universities in the UK has increasingly been on developing students as researchers (hence *The Undergraduate Research Handbook*, and the centres established at the University of Gloucester by Prof. Mick Healey, and at Oxford Brookes by Prof. Alan Jenkins).

Rewarding, essential, potentially taken for granted and relatively under-theorised, research supervision plays a key role in higher education in empowering students to become researchers. As both undergraduate and postgraduate student numbers grow in universities, we are increasingly being invited to supervise students' research projects – encouraging, supporting and enabling them to develop skills, values and practices essential to learning the roles and rules of research. Research is defined here as *the* crucial element of learning – a fascination with questioning the world, ways of enquiring and solving problems, and creating, innovating and developing discourse, strategies and interpretations. In this dynamic context, there is a clear need for sound, supportive and empowering supervision practices for students' research study, whether for dissertation, project or thesis. This book builds on shared experiences of good practice in research supervision at all levels (see Delamont et al., 1998; Wisker and Sutcliffe, 1999; Wisker, Robinson, Trafford, Creighton, Warnes, 2003; Kiley and Wisker, 2009), and on research (e.g. Pearson, 1999; Brew, 2001; Manathunga, 2005; Lee, 2011) into what makes for effective supervisory practices.

The Good Supervisor intends to engage supervisors and students in a learning dialogue. It provides supervisors with research-informed suggestions about the dimensions of supervisory practice, that is, systems and practices of working with conceptual frameworks, methods, processes of students' research, and issues and practices of personal effectiveness in this long-term, interpersonal interaction between supervisor and student. In its conception, and through my own extensive personal and workshop interactions with supervisors and those supporting the development of students and supervisors alike, it has been absolutely crucial that the book should provide

opportunities to engage readers in dialogue between research and experience, supervisor and supervisor, supervisor and student. This intends to be a useful, non-patronising book. It could not succeed if it tried to talk down to or 'train' supervisors. Instead, this book encourages reflection, dialogue and an exchange of good practice. Development suggestions are built *upon* and out of these practices. You are invited to engage with research evidence-based practice and reflective and evaluative stories from supervisors, students and educational developers, in a dialogue with your own experience. In each chapter, discussions, suggestions and activities or tasks to encourage reflection and good practice are integrated with experience and research.

Focusing on the role and support demanded of supervisors working with students, the book follows the shape of students' work. It considers how supervisors can support and enable students in their research towards, writing up and defence of dissertations, projects and theses at undergraduate and postgraduate levels. Although primarily intended for supervisors, it provides insights and task-oriented developmental suggestions that students could use on their own or in groups, with or without supervision.

The book takes novice, intermediate and experienced supervisors alike through the working life of supervisory relationships with research students, and students undertaking research projects. It invites the reader to consider the academic and administrative elements of enrolment and the development of a proposal at PhD, and the less heavily administrative process of developing a dissertation proposal for master's or undergraduate degrees. It deals with the development of a clear conceptual framework; the choice of appropriate research methodologies; information searches and dialogues with authors and theorists in the field; and the acquisition, management and analysis of information and ideas. The book also considers organisation and how to maintain momentum, as well as ways to ensure successful supervision and support for students through to the later stages of writing up, submission and, where appropriate, taking part in a viva. The final chapter looks at what may lie beyond completion of the research.

Issues of equal opportunities, including gender, sexuality, ethnicity, culture, power and authority, class, origin, learning style, language and tertiary literacy inform the discussion throughout, in terms of choice of learning approaches, access, study methods and supervisor/student interactions. Also considered are the needs of international students, those studying at a distance or 'offshore', and candidates studying part-time and/or in professional contexts. The supervision of one's colleagues, students undertaking creative research and the PhD by publication are also covered. Research and supervision involve human interaction and, in this respect, the book invites

you to work with your student, considering both research ethics and inter-
personal skills.

While those who are relatively new to supervision might find more of use
in Parts 1, 2 and 4 of the book, established supervisors should find Part 3
extends their thoughts and practices. There is something here for all of us,
throughout our supervising careers.

The Good Supervisor is unusual in that it is designed to support supervi-
sors of a variety of research students on a variety of research projects.
However, what the students all have in common is the research project. The
book intends to be:

• accessible for supervisors *and* for students: there are exercises and
  discussions of good practice;
• underpinned by research, the scholarship of learning and teaching, much
  of my own work and work from the UK, USA and Australia;
• pitched at undergraduate as well as postgraduate supervision. The scope
  is different, the authority/equality relationships are different, the length
  and depth of both the work produced and the time it takes to produce it
  are different, but otherwise many of the interactions and good practices
  have much in common.

The primary focus is supervising research projects in the social sciences,
humanities, performing arts, health and related areas, but there is also much
of relevance to colleagues supervising scientific research, and the new
second edition discusses some of the differences that science supervisors
with large research groups might deal with.

The idea for this book came about originally through reflecting on my
own practice as a student and as a supervisor, at both postgraduate and
undergraduate level, and finding there was a dearth of literature and of guid-
ance for me in the supervisory role. This is not unusual in educational devel-
opment, especially when a role, somewhat taken for granted and assumed to
be an everyday activity, suddenly takes centre stage. Postgraduate students
have been proportionally the greatest growth area in higher education in the
UK, USA, Europe and Australasia over the last twenty years, and recent
learning and teaching agendas increasingly focus on the student as
researcher. Research into and support for the learning of undergraduate
students in greater numbers is well established (see Gibbs, 1991). Now the
growth in the number of postgraduates brings with it similar issues of
student diversity. Suddenly, during the 1990s, there were noticeably more
women, more international and more distance postgraduates. Additionally,
while postgraduate full-time study was common among younger students in

the sciences, where they were often joining a research group, an increase was taking place amongst more mature students, and in the social sciences, the arts and humanities. The rise of the Educational and Professional Doctorates (EdD, PrD) began to take account of differing needs, as did the gradual development of a Master's in Research (MRes) and research elements in master's and undergraduate programmes, albeit often only single sessions on dissertation planning prior to supervisions. After the publication of the Dearing Report (1997), Metcalfe Report (2002–3), and the work of UKGrad/Vitae including the Researcher Development Framework Report (2011), ongoing debates about the importance of research as an essential learning activity have helped us to concentrate on developing research methods and skills in all our students. In the light of diversity, change and demand, supervisors and institutions need to focus on supervisory developmental needs and practices.

The role has become visible, and it needs to be clarified and developed, recognising differences from one subject to another, one institution to another, one supervisor to another. Initially, like other educational developers, I ran some supervisory development sessions in my own university to bring together supervisors, to consider and share our own experiences of good practice. I found that many who attended were already supervising undergraduate projects and dissertations, and were hoping to supervise postgraduates. Although many of us perform this role, there have been few opportunities to reflect on, develop, or share good practice with others. Supervisor development workshops 'took off'. I found that, nationally and internationally, I was being asked to run sessions on supervising generally, although specific topics were becoming more specialised: the supervision of international, offshore and distance students; supervision in the creative and performing arts; supervision in professional contexts; and supervision on issues relating to gender and diversity. Supervision is a demanding and rewarding learning and teaching experience that takes place within an international community of academic practice. Reflecting on and sharing experience of evidence-based good practice strategies can benefit all of us – supervisors and students, both postgraduate and undergraduate, at home and abroad.

This emphasis on the increasing importance of supervision grows, I would like to argue, from the tensions, globally, between on the one hand a commodification of knowledge in the new knowledge economy model, and, subsequently, a commodification of students, linking into what is an often simplified causal relationship with national wealth, and another model of learner empowerment and self-actualisation arising through a more intrinsic engagement with education and with challenging and creating knowledge.

In both halves of this, supervision as an aid to student success is upper-most. In one model it offers the support to enable the student to gain qual-ifications and skills and move on in the worlds of skills and jobs, and in the other it nurtures self-development, academic identity, self-worth and growth. These are competing models of the reasons for research and they can inspire, problematise and inform supervisory relationships and project completion. Related to this is the tension between supervisory responsibil-ity and control, and the need for students to grow as independent learners and researchers. In the more utilitarian model, another tension that super-visors have identified is in the time to completion, and whether there is enough time and enough challenge to encourage students to take the necessary risks and make the learning leaps to produce research which goes beyond passable to being sometimes ground-breaking. For several years now, data has been made available which indicates stage and success, and in some cases, time to completion. In Australia and New Zealand, doctoral students now only attract funding for their department if they complete in time (usually four years maximum, sometimes three). The supervisor has an important role to play here (see Chapter 2). As our students increasingly push the boundaries of research topics, practices and outcomes, we are invited to explore creative, supportive modes of develop-ing supervision to guide and empower them. This book does not pretend to dictate how to carry out the diverse and demanding supervisory role; instead it builds on successful development sessions I have been part of or have facilitated, on contemporary research and practice developed and published worldwide, some of which is shared at conferences such as the Quality Postgraduate Research conference, in Adelaide, and on its lists managed by Margaret Kiley, the American Educational Research Association (AERA) in the USA, Vitae in the UK, the postgraduate supervi-sion conference hosted by Stellenbosch University and through the IDERN (International Doctoral Education Research Network) symposia, and the list managed by Mark Connolly.

Initially, in researching and studying the role further, particularly in rela-tion to my work with colleagues on a successful Anglia Ruskin University Israeli PhD programme, and latterly in my supervision and examination of students from contexts as diverse as Malaysia, Madras, Brisbane, and the UK, and supervision workshops in UWI (University of the West Indies), Australasia and Europe, I have been made aware of the differing stories we all have to tell of our supervisory experiences and journeys. Indeed, the jour-neying model is one Australian colleagues have used extensively in supervi-sor development programmes (see Chapter 2) and which we have deployed in our own recent Higher Education Academy-funded National Teaching

Fellowship project 'Doctoral Learning Journeys (2007–2010)'. Some colleagues organising supervisor development have developed online support. I have written materials for and co-teach on the OCSLD (Oxford Centre for Staff and Learning Development) online module for master's supervisors, and a doctoral supervision module at the University of Brighton. In Australia, Geof Hill, Tania Aspland, Coralie McCormack and Barbara Pamphilon, among others, use storytelling and journeying. This, for me, accords with the feminist and action research paradigms from which much of my own work springs. I am grateful to them, and to others, particularly Delamont, Atkinson and Parry (1997), whose individual case studies were the first I read dealing with supervisory role exploration. Latterly, Anne Lee has developed research-informed supervision models, and, more radically, Catherine Manathunga, Barbara Grant, Michael Singh and Tai Peseta have problematised supervisory relationships and explored some of the underpinning liberal claims. Barbara Grant, Sally Knowles, Terry Evans, Margaret Kiley and Michael Singh, Liz McKinlay and Catherine Manathunga, and Gillian Robinson and I, have focused on cross-cultural supervision, as has my University of Brighton colleague Jennie Jones. The new focus on the research student's wellbeing and emotional resilience has led to ESCALATE (Higher Education Academy Education Subject Centre)-funded work with Charlotte Morris at the University of Brighton. All of these examples are at postgraduate level. A focus on postgraduate supervision, and the continued emphasis on students as researchers (Alan Jenkins, Mick Healey and colleagues), enables us to share and explore the role and build communities of good practice. This transfers into all our research supervision, whether it be with postgraduates or undergraduates.

In order to develop students as researchers, we need to help them to focus on asking research questions and exploring fields of study in critical, problem-solving, creative ways, matching this with a dedication to organisation and planning, and achieving coherence and clarity of expression. Another emerging field of study is that of disciplinary differences recently explored by Alison Lee (postgraduate supervision conference, Stellenbosch, 2011, and Lee and Boud, 2008). In addition to disciplinary differences, a number of generic issues impact on all students undertaking research, and success in these areas leads to a variety of postgraduate and undergraduate skills including, among others:

- time management
- problem-solving
- conceptualisation
- critical thinking

- conceiving and actualising projects through to successful conclusions
- writing for different audiences
- articulation – coherence and linking expression, and quality of expression.

Supervision is now seen as a highly prized, skilled teaching role at undergraduate, master's and postgraduate, and also postdoctorate level. It is recognised currently that the role of the supervisor differs in different disciplinary contexts, so that, for example, there are 'super supervisors' in the sciences and some social science contexts, who supervise large groups on multi-million-pound projects, such as at Trinity Dublin, the Royal College of Surgeons in Ireland, and the University of Gothenberg, among those universities who have invited me in to contribute to their supervisor programmes and their research leadership and management programmes. Supervisors are now involved in daily supervision of a range of researchers, and also in activities related to supervision, such as externally examining the work of candidates from other universities, developing long-term research networks, and research activity building, ensuring a robust research student culture, a high success rate and fast enough throughput of successful research students so that their university can successfully bid for repeat or new funding.

Much of this increased, more professional focus is evidenced in the expansion of the conferences and publications in the field. The Quality in Postgraduate Research conferences (QPR – Adelaide) have grown in importance, and UK Grad has changed and grown to become Vitae, which now deals with all aspects of a researcher's (postgraduate, and postdoctorate) life and needs, and to some extent the needs of supervisors also.

The original book grew from my own research supervision development workshops, and the practice of those with whom I have come into contact. It intends to theorise such good practice and to relate it to experience, so avoiding any kind of 'training' speak and any talking down to colleagues who read the book. These elements are retained in this second edition so that it avoids a 'training' tone, engaging us all as colleagues in a broad community seeking to ensure and develop good practice as supervisors working with the current and next generations of researchers, who are building knowledge and solving problems. This second edition of *The Good Supervisor* includes issues which have become important since the last book was published. It is far more research-informed and up to date in this respect than its equally useful predecessor.

The Good Supervisor is an essential text for supervisors both new to supervision and experienced, at any point in their professional work with students

at undergraduate, master's and postgraduate levels and beyond. It both introduces you to good practice and extends your engagement with the scholarship, practices and issues of supervision.

Most universities now have not merely a baseline development programme for supervisors but more specialist elements focusing on, for instance:

- online distance supervision and feedback;
- the writing process;
- grant proposals arising beyond the PhD;
- professional doctorates, educational doctorates and a range of hybrid programmes.

This second edition builds upon the successes of the first edition and, additionally, makes full use of the wealth of new research and publications about supervision to which I and colleagues have contributed since 2004, and the range of new, accessible, developments in this professional field. It also makes good use of my own writing and contribution to a diversity of workshops and course provision, and maintenance of communities of practice. It introduces, updates and engages supervisors working with all levels of students' work, at all stages.

Your work as a supervisor will benefit from the newly developed and recognised theories about 'conceptual threshold crossing' (Wisker, Robinson and Kiley, 2008; Kiley and Wisker, 2009; Wisker and Robinson, 2008; Wisker et al., 2010). Conceptual thresholds are seen as crucial moments in the research journey, and as ways of identifying when students start to work conceptually, critically and creatively, and so are more able to produce breakthrough thinking, and a 'good enough' PhD, or lower qualification, as appropriate. They are also moments and ways in which supervisors work to 'nudge' students through this threshold, using, for example, their reading, writing, feedback, dialogue, data management and interpretation, and community-building processes. Conceptual threshold crossing and its basis in discipline-specific threshold concepts will bring a unique research-informed approach to this new book, which approach is currently well received in keynotes, conference papers and workshops. Our research into conceptual threshold crossing to achieve critical, conceptual and creative research outcomes and research identities, and the role of the supervisor in this development, are variously explored below in Chapter 2, and later in Chapters 19 and 20, which deal with the examination and viva processes.

Supervision has moved on since 2005 when the first edition came out. In addition to incorporating the wealth of the research into supervision and post-

graduate learning, to which our own research has contributed significantly, the book retains the 'start to finish' structure of the original and offers insights, research-based information and guidance, and practical examples in:

- the role and practice of supervision in different disciplinary contexts, so that, for example, we consider the lone supervisor and student relationships (more established in the humanities and arts), the team and committee supervision processes, and the work of 'super supervisors' in the sciences and some social science contexts (supervisors of large groups on multi-million pound projects);
- a focus on encouraging and supporting the writing process thoroughly, ongoing throughout the student's research;
- cross-cultural supervision and working with international students;
- online distance supervision and feedback;
- the broader role of the academic supervisor, including external examining of the work of candidates from other universities, developing long-term research networks, and research activity-building;
- ensuring a robust research student culture, a high success rate and a fast enough throughput of successful research students, so that the university can successfully bid for repeat or new funding;
- employment beyond the PhD;
- sustaining research communities and networks – joint writing and researching.

If we consider the development needs of research students, we can begin to imagine some of the requirements of supervisors who work with them, and so begin to devise supportive, developmental activities and programmes. However, there are no fixed behaviours to be trained. Each supervisory relationship is one between learners, and so this relationship is more like a dance, matching the steps of one to the other, and working together to produce a research artwork of quality, creativity and substance.

▶ Why are learning and research important?

Learning is essential for human growth. Research is *the* fundamental human learning activity, involving enquiry, problem-solving, diversity, flexibility and decision-making. It encourages and enables the development of creative thinking and problem-solving strategies and abilities, which in turn help others to approach everyday life, as well as professional, political, local, national and international questions and issues.

'Lifelong learning' (Reeve, Cartwright and Edwards, 2002), 'learning organisations', 'learning societies', 'learning communities', 'communities of practice', even 'learning cities' are all buzz words which suggest that communities recognise and wish to promote continual learning, reflection, awareness, problem-solving and improvement, and intelligent, creative responses to the complexities of life and of knowledge generation.

Research as a form of learning is crucial in societies for energy, motivation, creativity, linking theory and practice, and establishing informed habits and skills for continuing to ask questions and seek information and answers, in context. It is essential for social justice and the creation and advancement of knowledge. One anonymous reviewer shared a definition developed with other Australian colleagues:

> Research describes any critical and creative activity undertaken on a systematic, disciplined basis and dedicated to increasing knowledge. The results of research therefore take many forms. Research can contribute to knowledge directly through discoveries, or otherwise through innovative ideas and techniques, conceptual refinements, or constructive critiques and syntheses which extend existing knowledge or its applications.
>
> The defining characteristics of research include (i) a dependence on formal, disciplined modes of inquiry, (ii) technical, conceptual or epistemological innovation, (iii) an open, rigorous approach to the testing of results, and (iv) a commitment to publication in some form. Publication in a general sense is the goal of a research enterprise, but the results of research activity can be 'published' in many ways, from a printed book or article, an architectural design, a patent or a computer program, to a creative composition or artefact in the visual or performing arts, which adds to the body or range of knowledge or creativity.

Research involves the development of researcher identities, and much recent work focuses on academic identities, the ontology of being a researcher; exploring challenges, identity confusions and competing demands; and the ways in which academics, including postgraduate researchers, learn the world views, behaviours, perceptions and discourse of their discipline at postgraduate level, and the strategies and practices which make them effective researchers, all of which is part of the development of an academic identity.

▶ **Learning steps and learning leaps: from undergraduate dissertations to the PhD**

A first piece of research is a major personal and learning achievement and, for many, the dissertation is *the* key moment when students begin to appreciate the stages, problems and potentially successful practices of research: from interest to enquiring; question-forming; design of a study project; activating a piece of research through the use of a conceptual framework; underpinning theories, methodologies and methods; handling, analysing and interpreting data; identifying findings; managing and discussing their significance at factual and conceptual levels; and finishing a sound piece of research which is both written well and appropriately disseminated to effect change. Alongside these, students learn, we hope, the human interaction skills of making the most of their supervisor, of other institutional support, and that of family and friends. An undergraduate dissertation is a relatively small and time-bounded process and product when compared with a PhD, but in essence it involves many of the same skills, cast of mind and hard work. When it is undertaken, usually in the final year of a student's degree, it is also usually the longest and possibly, therefore, the most daunting piece of work so far. In this it resembles a master's dissertation and a PhD, with step changes at each level in research complexity and depth. Each research project stage is a learning step, a challenge, a development moment. Completion will involve a student immersing him- or herself in and making progress with the discourse and concepts of the subject and with the discourse of research. Undertaking research and achieving research outputs as projects and written pieces will enable students to begin to develop a dialogue in their academic community. In addition to subject-specific skills, generic, transferable research method skills should be developed at both undergraduate and postgraduate stages.

Many undergraduates may already have begun to develop research for essays and projects, engaging with the academic community through having new (enough) ideas and arguments. Many will find they need supervisory guidance to identify subject-specific and research skills and then to develop them. Students must be encouraged to reflect on these skills, to recognise them, adapt and utilise them in the future.

As undergraduate dissertations are one of the first formal steps in research, supervisors will probably need to structure and guide undergraduates rather more than postgraduates. For many academics, supervising an undergraduate dissertation is the first experience of supervising student research. Some may develop their own supervisory skills purely through dissertation supervision, while others may develop these skills in the capac-

ity of management, mentoring or similar roles. Development opportunities and support should aid the supervisory role.

In discussing and sharing developmental ideas and practices in this book, we will be drawing on supervisory expertise and research into good super-visory practices at *all* levels of the students' and our own careers. However, the main focus is on postgraduate supervision because of the length of the supervisory relationship, the complex, conceptual level of the work involved and because it is a developmental opportunity. Those undertaking under-graduate supervision might well be thinking ahead to postgraduate supervi-sion. Differences which relate to the undergraduate and postgraduate levels – in scope, time, autonomy, structure and guidance – will be indicated and debated throughout.

▶ Conceptual threshold crossing, research students working at a conceptual, critical and creative level, and the supervisor's role

Carrying out an important research project can provide us with an intellec-tual quality of life and an opportunity for emotional growth and satisfaction. Since the first edition of this book, my own research and that of close colleagues has engaged with both the theory and practice of threshold concepts (Meyer and Land, 2005, 2006) and our own theories of conceptual threshold crossings (Wisker, 2006, 2008, 2009a, 2010). Threshold concepts emerged during research for a different project – 'ETL' (Enhanced Teaching-Learning) – which sought to identify factors leading to high quality learning environments within four (originally five) disciplinary contexts across a range of higher education (HE) institutions.

Meyer's notion of a *threshold concept* was introduced into project discus-sions on learning outcomes as a particular basis for differentiating between core and essential learning outcomes that represent 'seeing things in a new or transformed way' and those that do not.

A threshold concept is seen as something *distinct* within what university teachers would typically describe as 'core concepts' because of the necessary and transformative elements each threshold concept represents. Threshold concepts are discipline or discipline-cluster specific. For example, under-standing 'representation' as a threshold concept in literature and the arts is necessary for appreciation that signs, symbols, images, language elements of a novel, or of a painting, are more than versions or copies of the real world, they also represent comments, interpretations, creative developments, perceptions and sometimes complex messages about views on that world.

Furthermore, threshold concepts may represent, or lead to, what Perkins (1999) describes as 'troublesome knowledge' – knowledge that is conceptually difficult, counter-intuitive or 'alien'.

Threshold concepts are:

- distinct from core concepts – more than a building block, leading to a qualitatively different view of the subject matter;
- troublesome – difficult because they shake established beliefs;
- transformative – once understood they are likely to lead to a perceived shift in perception on the subject, can shift identity and personal subjectivity. This is similar to Mezirow's (1978) work on perspective transformation;
- bounded;
- probably irreversible;
- integrative – expose the previously hidden interrelatedness of something.

In our research we first sought to discover whether there were different threshold concepts to be appreciated in disciplines when studied at postgraduate level, and explored two kinds of threshold concepts or conceptual thresholds in postgraduate study:

1   Discipline-specific threshold concepts
2   Generic postgraduate-level conceptual thresholds

We (Kiley and Wisker, 2009) found that while postgraduate students might deepen or extend their understanding of how a threshold concept operates, or indeed only come to appreciate how it enables deep learning in their discipline, once they engaged with postgraduate study additional to undergraduate study of professional practice, there did not seem to be any perceptions among students, supervisors or examiners of any different threshold concepts at postgraduate level.

However, in interviewing postgraduates about their learning, and supervisors about their supervision and awareness of student learning development, and then interviewing examiners on both the Higher Education Acadamy (HEA) National Teaching Fellowship-funded doctoral learning journeys (DLJ) project, 2007–2010, and the longer running postgraduate learning project called the 'parallel project', 1997–2011, we began to be aware of the ways in which, through deepening and extending their study, making it more conceptual and critical, postgraduates showed evidence of making learning leaps or more complex deeper understanding, which leads to the creation of new ideas and interpretations as well as articulation of their research work.

These learning leaps could happen at several stages in the student's work, from the identification of a do-able research project based on a sound hypothesis or research question (depending on the discipline area) through to an articulate defence in the viva and publishable work. These moments of development and identifiable levels of work we termed 'conceptual threshold crossing' moments. Following early scrutiny of interviews, we set out in the DLJ and parallel projects to ask students, supervisors and examiners directly about their awareness (or not) of these moments, their characteristics, and evidence of them in the student practice and articulation. We also sought to find out how supervisors supported and 'nudged' such developments (Wisker and Robinson, 2008; Kiley and Wisker, 2009; Morris et al., 2010).

We then began to focus on the stages through which postgraduates move to gain that deeper understanding and make those conceptual crossings and learning leaps. What emerged were stages which can be seen as similar to those through which students move to acquire threshold concepts, some in the moments before the understanding comes into view (liminality), not yet fully formed – moments where the ideas just do not emerge clearly (stuck places), and moments where they become clear and there are ways of expressing them (praxis and dialogue). What was clear from the comments of students and supervisors in their interviews and journalling (DLJ) was that there are shifts in the way in which a student sees the world and themselves in it, and these are linked to their awareness of and confident expression of knowledge creation – so ontology and epistemology are linked here. As the student develops in their perception of themselves in the world, their articulation of their conceptual understanding deepens. The characteristic stages and dimensions of conceptual threshold crossing which are identified are:

- Liminality (stuck places and movements through);
- Praxis (integration of concepts and action, change);
- Dialogue (discourse of subject and research, dialogue between ideas and practice, people);
- Ontology (identity/identities, being in the world);
- Epistemology (knowledge-contribution to meaning).

Conceptual threshold crossings, the developmental moments in a student's research as learning, are where he or she begins to work at a significantly different (developed) more conceptual, critical and creative level.

Some of the natural developmental stages in students' research journeys, which offer threshold-crossing moments for postgraduates and which we, as supervisors, might help promote or nudge with focused questions and recognition, are:

- Identifying a research question;
- Theorising – interaction in a dialogue between and with the literature in the field, with theories and their own work in the literature review or theoretical-perspectives chapter;
- Methodology and methods – engagement at a conceptual level with the way in which methodology and methods can enable students to address their question or test their hypothesis;
- Research design which actions the question/hypothesis;
- Data analysis which carries out a theorised exploration, investigation and interpretation;
- Conceptual conclusions;
- Articulating the argument, conceptual level, and contribution to knowledge which the master's or doctorate represents, both in the dissertation or thesis as a whole, and in the viva defence at PhD level.

One of our main roles as a supervisor is in encouraging or nudging the learning development and conceptual threshold crossings of our students. We need to consider most the ways in which we are enabling, encouraging and empowering students to work conceptually so that they are being critical, evaluative, and problematising and creating – not just being busy; so that they become fluent in the discourse of their discipline or interdiscipline, and so the thinking, planning, research work and articulation are using the meta-language of postgraduate-level expression and the language of doctorate-ness (which includes unusual terms such as 'conceptual framework', 'justification for the award' and so on).

► The PhD as a learning step

The PhD is a major academic, professional and personal achievement. Upon undertaking and then completing a PhD, a student will have made an original and valuable contribution to knowledge. Their work will be read by, built on and used by others – to build theory, to fuel change and encourage good practice. The achievement of a PhD is also a beginning: the student has made a major entrance into the academic community. By carrying out research through the full cycle of planning, actioning, drawing conclusions and communicating, they will have developed a range of valuable skills.

Nor is the PhD an end in itself. The learning never stops. It is essential to share work with others in the academic community and beyond. Several kinds of sharing are involved. First, we have shares in others' work – sharing and working with others as a learning community as they develop their pre-

and post-doctorate research. Following the achievement of a doctorate, students are involved in sharing and communicating, supporting and enabling, building on each other's research and learning in learning communities (Barnett, 2002), and contributing towards enlightened learning societies (Eagleton, 2000; Gibbons et al., 1994; Halpin, 2003), which make enlightened, creative decisions about fundamental human issues and practices (Squires, 1994; Rudd, 1985). This is essential work. It is partly enabled through continuing to move forward in learning. It is also enabled by transferring learning into professional and practical work through disseminating and sharing with others in:

- conferences and symposia;
- publications;
- consultancies.

▶ Continuing to research and continuing to develop research skills

It is important for students to build on the research they have carried out, continuing to ask new questions, extending both old and new boundaries – looking at those earlier designated areas 'for future research' or considering where in their own thesis they imagine others taking their work further, indicating 'other researchers might ...'. For many, practical outcomes are a main research aim so, following the achievement of their PhD, they need to put research work and its outcomes into practice, researching the effects of their discoveries and developments. Carrying out new research, developing further research skills, gaining research project funding and leading teams also follow for those who seek a research career, while applying research in professional or other practice might be the outcomes for others.

Reflecting on and identifying the wealth of skills developed during research is an important activity both during and after the research. This identification contributes to performance development, personal self-esteem, confidence-building and effectiveness. Encouraging and supporting our students in these developmental activities are also part of being a supervisor.

▶ Content and sources of the book

This introduction establishes the importance of research as a knowledge-building, creating and sharing activity, identifying the key role the supervisor

plays in empowering and enabling students to engage successfully in research. It introduces readers to the similarities and differences between undergraduate and postgraduate research supervision, and to different educational and staff development paradigms underlying the book as a whole. *The Good Supervisor* utilises three kinds of sources. It draws from solid research-based evidence, as appropriate for a book dealing with supervising research practices; from narratives, where stories and interviews enact theories in practice for sharing and consideration to fuel development; and it uses logically oriented 'good practice'.

The book is structured to explore supervisory roles and practices in relation to the development of the student's research project, from identification of a possible research area and question through to completion, submission and, in the case of PhD students, the viva and beyond. Each chapter combines systematically identified explorations and suggestions of good practice arising from research and experience with the self-reflective 'community of practice' mode of sharing and developing your own, owned response to ideas and issues arising. Some researchers or supervisors might be more comfortable with one mode of expression, others with another. The idea is not to dictate but to engage in a dialogue, exploring suggestions that have arisen from sharing experience, undertaking research, and through face-to-face sessions with practitioners worldwide. From experiences of supervision related to me by students, participants in postgraduate supervisory workshops, colleagues working with undergraduates and postgraduates across a wide range of subject areas, and from my own experience as supervisor, educational developer and researcher, I have compiled extracts of narratives, interviews and case studies of supervision in action. These represent some 'typical' or exemplary cases of supervisor and student experience to illustrate issues and particular points. A number of issues are raised in each chapter concerning challenges faced by students and supervisors alike and how we, as supervisors, can enable and support students in making choices which suit their research, empowering them to be successful researchers.

As a reader, you are invited to consider ways that might inform supervisory practice. This active and reflective element is prompted throughout, but particularly in a number of boxed tasks and activities. Some tasks and activities are less reflective and are intended to be used or adapted in your interactions with students. Such involvement is designed to lead to owned self-development as a supervisor.

▶ **Structure of the book**

The book is in four parts. Its focus is on the work of the supervisor, on research-informed insights into the issues and good practice of supervision, and practice and research-based development suggestions for supervision, mapped onto stages of students' research, completion and beyond.

P**art 1   First Stages of Research Supervision – Getting Started**
This section takes you as supervisor through early stages of working with students, contexts, subjects, and establishing and maintaining effective working relationships. It considers programmes designed to support supervisors in their development of good practice.

Ch. 1 Introduction: establishes the role of supervision and introduces early research into the practice; focuses on support for sound, supportive and empowering supervision practices for students' research study, emphasising difference for full- or part-time, and distance study.

Ch. 2 Supervision and research learning: differences and issues: establishes different practices and disciplinary differences. Introduction of the world of 'super supervisors' and managers of large research groups – more science and social science, the lone supervisor, larger networks and committees.

Ch. 3 Supervisors and sustainability: working together in supervisory teams, networks, fora, communities and development programmes: focuses on supervisory teams and making the most of development programmes. It includes ideas about sustaining communities of supervisors through undergraduate, master's or postgraduate conferences, and supervisor networks.

Ch. 4 Establishing and maintaining good supervisory practices: looks at organising and managing the supervisory relationship over time, locally and at a distance. The specific focus is on supervision, and on establishing good practice in first supervisions. It considers learning contracts and skills audits, practices, and the variety of roles, as well as negotiating responsibilities for major decisions.

Part 2   Establishing Research Processes and Practices
This section concentrates on the construction of the research, helping students to develop workable research questions, conceptual frameworks, literature reviews or theoretical perspectives, methodology and methods, design of the study, and proposals. It also considers research ethics.

Ch. 5 Defining titles, research questions, conceptual frameworks, and developing proposals: looks at the first stages of a supervisor's work with students, supporting them to turn research ideas and interests into research questions and proposals, underpinned by sound conceptual frameworks. It considers the use of analogies and visual practice to enable conceptualisation, visualisation and manageability of projects. The chapter emphasises stages where the writing and conceptual work starts.

Ch. 6 Enabling students to carry out a successful literature review/theoretical perspectives chapter: this explores how to support students in developing a successful literature review, in a dialogue with writing and arguments in their field. This is where they start to write with an awareness of the conceptual level of their work and their contribution to knowledge.

Ch. 7 Methodology, methods and ethics: helps supervisors to help students select appropriate methodologies and methods for their research (underpinned by their world view). This is seen as one of the key roles of the supervisor, supported by expert others, and research development programmes. In our supervisory roles we also advise students on how to research in an ethical manner. The chapter does not in any way attempt to teach supervisors about methods but instead clarifies differences between methodology and methods.

Ch. 8 Supervisory dialogues: considers the function of dialogues in supervision. Supervisory dialogues, whether face to face or through electronic/postal/textual means, are the main way in which we work with our students to encourage, direct, support and empower them to get on with and complete their research and writing. The chapter also takes a research- and experience-informed view of online supervision.

Ch. 9 Encouraging good writing: learning how to develop an argument throughout a dissertation or thesis, and how to ensure an argument is organised, well expressed, informed by theory and backed up by appropriate evidence. This chapter also uses materials and theories about conceptual threshold crossing through writing, and moving beyond 'stuck' places.

Part 3   Working with Students – Issues for Supervisors
The role and support turns to issues of interpersonal relations, over time, considering roles and supervisory dialogue interactions, helping students set up support groups, dealing with differences, difficulties and practices related to gender, international students, and distance. It looks at the variety of kinds of research, considering relatively new forms – using creativity, research degrees by publication, and professional practice-based research. It

also looks at how, as supervisors, we can support students to get on with their work and overcome difficulties, maintaining momentum.

Ch. 10 Helping students to help themselves and each other: not all the support students need to carry out successful, planned research through to completion can be provided by the supervisor. Indeed, students need to enter and themselves contribute to a supportive academic community, which can nurture them through the momentum of a thesis and build research capacity and networks beyond the research. We look at setting up peer groups and academic community support, including staff and student seminars, online support and research development programmes, critical friends and support groups.

Ch. 11 Dealing with difference: working with different kinds of learners and learning styles: and at different levels – undergraduate, master's, doctorate and beyond. The chapter considers differences between part- and full-time students, specifically relating to issues of ensuring momentum and conceptual level. Research is seen as a form of learning, using new work on meta-learning, threshold concepts (Meyer and Land, 2006) and conceptual threshold crossing (Kiley and Wisker, 2009; Kiley and Wisker, 2009). Suggestions are made as to how we might recognise our students' learning approaches and better enable them to be successful in their research-as-learning.

Ch. 12 Supervising international and culturally diverse students: **cross-cutural issues**: increasing numbers of postgraduate and undergrad- uate students from international (predominantly Near, Middle, Far Eastern or African) contexts are studying in (predominantly Western i.e. European/ Australian/US-based) universities in a variety of modes, either on site or at a distance. This chapter explores some of the issues and experiences of working with students from international contexts undertaking research, making suggestions for good pedagogical and other practices. It uses the research and work on internationalisation of the curriculum (see HEA subject centres), cross-cultural supervision (Quality in Postgraduate Research Symposium 2008, Grant, Evans, Knowles, Wisker and Manathunga) and supervision of indigenous students.

Ch. 13 Study and support at a distance and for part-time students: increasingly students, both undergraduate and postgraduate, international and home originated, study with UK, US and Australian universities (among others) at a distance. Research students based abroad need systems to contact their university supervisor – by fax, phone, letter, email and, if they are available, by video conferencing links between individuals or groups of

students and supervisors. This chapter uses the considerable developments in online support, virtual learning environments (VLEs), and feedback through tracking changes. It also discusses the use of skype and SMS, and the establishment of local and international networks through email and social networking.

Ch. 14 Gender, culture, age and research studies: gender can play a big part in the supervisor and student relationship, and in the topics and approaches to research. This chapter refers to the wealth of work looking into ways in which culture and gender differences affect the relationship, topics and modes of research.

Ch. 15 A little too close to home: supervising your colleagues and/or other practice/professional-based research: many of us now supervise students who wish to engage with their own professional practice, perhaps including their clients, students, patients, colleagues, institutions, etc. as part of this research. Alternatively, or additionally, we might supervise our own colleagues engaged in practice-based, professionally oriented and other research. This chapter looks at professional practice-based and action research, juggling work and research, and at relationships between supervisor and student in the workplace environment where they are professional equals.

Ch 16 New ways: supervising creative research work and the PhD by publication: this chapter considers specific issues which arise in supervising students engaged in creative research, such as visual research, arts practice and the media. It considers new forms of the PhD, such as the PhD by publication, and the specific aims and demands of this work.

Ch. 17 Maintaining momentum: linking quality and wellbeing – through transfer, progress reports, changing supervisors, and any difficulties: Research is exciting, demanding and rewarding but can also be a lonely and lengthy business, compared by one PhD student to long-distance running. This chapter focuses on how students can make the most of research degree development programmes and peer group support, as well as their supervisor, and considers moments of transfer, managing particular problems in the design, actioning data collection, and interpretation of elements of the research.

Part 4   Managing the Research Process to Completion and Beyond

This section focuses on the support for writing, overall conceptual development and skills gained, towards the end of the doctorate, master's or undergraduate research process. It looks at ways of supporting students to

produce good quality work which is well argued, articulate, theorised and makes a contribution to knowledge. It considers in particular how students can be supported up to and through and beyond the examination processes of the written thesis or dissertation, and if appropriate a viva. But since our support and supervision of students does not stop with examination, we also consider publications, presentations and life beyond the research.

Ch. 18 Writing up the thesis or dissertation – quality and standards: this chapter focuses on the expectations of form, quality and kind of writing in undergraduate dissertations, master's or PhD theses. Particular emphasis is placed on supporting students to write coherently, elegantly and at a sufficiently conceptual, critical and creative level for their award. It also considers ways of giving developmental feedback throughout the writing process.

Ch. 19 The examination process and examiners: this chapter considers the examination process from all sides – student, supervisor and examiner. While undergraduate and master's students producing dissertations, and most of those writing RHD theses in Australia, are highly unlikely to be asked to take part in a viva, every dissertation or thesis is read by at least one or two examiners. The PhD viva is discussed in the next chapter. It considers how important it is to choose the appropriate examiners, and ways of enabling students to edit their work, share it, get some of it peer reviewed, and write with confidence, so it is likely to pass. It includes research information on examiner decisions, practices, issues of conceptual/critical work and presentation, as well as how to manage the dynamic of the examination.

Ch. 20 Supporting students towards a successful PhD viva: this chapter considers how to support students working towards a successful viva, mock viva preparation, the actual viva and what is expected, typical questions, and how to prepare students to answer at a more than descriptive level, also supporting students in managing stress. It builds on much new research into preparing for the viva and the importance of the viva process (Trafford and Leshem, 2008; Kiley and Mullins, 2002).

Ch. 21 Supporting your student post viva/exam: the supervision process is often thought to end when students submit the dissertation, or, at PhD level, when they submit the thesis and undertake the viva. In actuality, this only seems the end of the supervision project, because submission appears as such a cathartic and final process. In this chapter, we will look at ways in which our supervision extends to supporting students *after* submission and examination, including (for PhD) the viva process, should there be revisions and re-submission. It addresses issues of part-time and distance students – distance, access to facilities and losing momentum.

Ch. 22 Life after the research: sharing research, presentations, publica-
tions, identifying postgraduate/graduate outcomes, and research capacity
building: this chapter considers our roles with students after they have effec-
tively and successfully completed their research project, and what students
can do with their research and experience. Many will, of course, want to
share their work in conferences and publications long before they have
finally handed in the thesis or dissertation and will need support in deciding
when, where, how and what to present or publish. Similarly, students should
be thinking throughout their research about the kinds of skills and learning
outcomes they are likely to achieve, both through undertaking successful
research (and some unsuccessful research) and by taking an active part in
research development programmes. They contribute to research culture-
building and knowledge generation. It also includes supervisor self-develop-
ment and management. This chapter looks at new research on the impact of
research education on culture, professions, society and the individual
(Wisker, 2008; Kiley, 2008). It also considers how students can be supported
to help develop sustainable research communities.

▶ Structure of the chapters

Each chapter begins with a summary of areas to be covered, raises issues
and questions in the text, or in task boxes, and pulls together good practice
suggestions from research, scholarship and experience for your considera-
tion. The initial focus in each chapter is on postgraduate research, although
it is assumed that the necessary stages of developing research are very
similar in kind if not in scope to those needed by undergraduates. Where
they present as very different from postgraduate supervisions, specific
sections will look at master's and at undergraduate supervision.
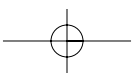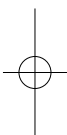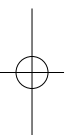
Several chapters contain practical or reflective activities/tasks for you to
use with your students as part of the process of being supervised and of
carrying out effective research. Each chapter ends with a summary of the
main points and, where appropriate, further reading.

The primary readership for this book is anyone who supervises under-
graduate or postgraduate research projects, dissertations and theses,
although students will also find its ideas useful to them in their research.
Based both on my own UK and international research and that of interna-
tional others in the field, as well as experience, this book provides an essen-
tial, accessible, yet scholarly guide for both new and experienced
supervisors. The second edition of *The Good Supervisor* is up to date and
research-informed – based on the knowledge that, as supervisors, we like to

know the suggestions you read about have a body of research as well as a body of practice underpinning them.

► **Further reading**

Kiley, M. and Wisker, G. (2009) 'Threshold Concepts in Research Education and Evidence of Threshold Crossing', *Higher Education Research and Development*, 28(4), 431–41.

Manathunga, C. (2005) 'The Development of Research Supervision: Turning the Light on a Private Space', *International Journal for Academic Development*, 10(1), 17–30, 207.

Meyer, J. and Land, R. (eds) (2006) *Overcoming Barriers to Student Understanding: Threshold Concepts and Troublesome Knowledge* (Abingdon: Routledge).

Morris, C., Wisker, G., Cheng, M., Lilly, J., Warnes, M., Robinson, G. and Trafford, V. (2010) *Wellbeing and the Research Student* (Falmer: University of Brighton Press).

Wisker, G., Morris, C., Cheng, M., Masika, R., Warnes, M., Lilly, J., Trafford, V. and Robinson, G. (2010) 'Doctoral Learning Journeys – final report of the NTFS-funded project'.

Part 1

First Stages of Research Supervision – Getting Started

2 Supervision and research learning: differences and issues

This second revised edition of *The Good Supervisor* is research- and practice-based. It can help situate you as a supervisor in the current research literature in the field of research, learning and supervisory practices. It is based on several dynamic sources and uses research evidence-based information from the work of a wide range of international researchers, scholars and practitioners engaged with research learning, and particularly the learning and research practices of postgraduate students and supervisors. It is also based on my own research and that of my colleagues on major funded and unfunded, linked projects into doctoral learning, supervisory practices and examining practices. It is more firmly founded in my own research than the first edition, because part of my own research journey has been to delve further into the research learning and supervisory-oriented research literature and to develop, manage and research for a number of projects, from which have arisen a number of conference papers and publications, and other projects. In a sense, the developments between the first and second edition are testimony to the way in which your own research journey can continue to intrigue, inspire and motivate you (or, in this case, me and others in the field) as a student supervisor and research leader for a considerable period of time. This research began for me when I was introduced to my first cohort-based PhD programme in 1997 and I have been researching postgraduate research learning and supervisory practices ever since. Throughout this book, the research beginning in 1997 is referred to as the 'parallel project', to distinguish it from a larger but more short-term major funded project, explained below. The book makes use of the research projects by exploring and sharing the learning journeys and interviews of a range of students and supervisors, in order to offer examples of research and supervision which, it is hoped, are of use to you as a supervisor.

The parallel project has explored dissonance and variation in postgraduate learning, meta-learning, or awareness of and ownership of one's learning

(Wisker et al., 2003); the developmental support of communities of practice (Wisker et al., 2003); and conceptual threshold crossing, or the existence and nurturing of learning leaps at different stages in a postgraduate student's research learning (Wisker, 2010). This latter theory underpins and informs much of what is explored in this second edition of *The Good Supervisor*. The book also draws on the second externally funded project, 'doctoral learning journeys', in which, most recently, I and colleagues have been involved (2007–2010 with Charlotte Morris, Ming Cheng, Rachel Masika, Gillian Robinson, Vernon Trafford, Jaki Lilly and Mark Warnes, consultancy from Erik Meyer and Margaret Kiley). This is a Higher Education Academy-funded National Teaching Fellowship project, which, in the main, follows the learning journeys of 22-plus PhD students for over three years, and uses journalling and interviews to enable them to explore their moments of feeling elated, confused, stuck, celebratory and making learning leaps, or as we theorise it – conceptual threshold crossings (Kiley and Wisker, 2009) – to work at sufficiently critical, conceptual and creative levels to achieve their PhD. It also looks at the practices of supervisors and examiners, and asks questions about where and when post-graduate students' work can be seen to be sufficiently conceptual, critical and creative to gain a PhD, and how we as supervisors 'nudge' the learning-leap moments when students overcome hurdles in their work and produce such quality research and discussion of it. Importantly for this book, both projects provide important information, ideas and practices for supervisors.

There are now many debates around models of supervisory practice, and the research and development literature offers a repertoire of interactions which could be most useful in matching supervisor practices with the changing student behaviours and needs at different stages in different projects. If what is offered here seems like a mechanistic 'quick fix', however, let us not forget Barbara Grant's (2003) comments on supervision: 'supervision is complex and unstable. It is an interesting mixture of the personal, the rational and the irrational, the social and the institutional, full of possibilities of all kinds, a source of great pleasure to some students and supervisors' (p. 176). A positive and sensitive model for the student/supervisor relationship is a collegial one of student as co-inquirer or co-producer of knowledge (Watson and Schuler, 2009), while, elsewhere, Lee and Green (2009) explore research, seeing models of apprenticeship, authorship and discipleship.

We have also become more aware that pedagogical and research practices are affected by disciplinary differences (Golde and Walker, 2006; Golde, 2007; Entwistle, 2007).

This chapter considers different supervision models, disciplinary differences and current trends and tensions in research for, and supervision of, students' research and the PhD in particular.

This chapter considers:

- *my research journey: fascination with research and experience as a research student*
- *introduction to the postgraduate project*
- *developing and enabling supervisory relationships*
- *quality time*
- *making it real*
- *the role*
- *tensions and developments in postgraduate research and its supervision*
- *different forms of supervision for different learners in different disciplines*
- *supervision as a contested space: tensions and issues in supervision*

▶ My research journey: fascination with research and experience as a research student

It is only fair that I should start with myself and my research as a learning journey, to begin debates about the different experiences of being supervised, the postgraduate project, and learning communities – that is – fitting supervision into a broader context of support. Undertaking an MA and then a PhD were two of the most important decisions I ever made. Achieving them both was amazing, giving me a real sense of progressing in my own learning and boosting my confidence. Although that is not why I undertook either of them, they have proved enormously useful professionally. My MA was part-time, Monday evenings, while I taught at a local school and then at a Further Education college (TAFE in Australia). It enabled my brain to get into gear. Mine was an English MA; we looked closely at poetry, Shakespeare and modern fiction. There were only a few of us, so we all discussed furiously. The tutor was one of the group. We made friends. When the teaching stopped, we carried on learning, supported each other, met regularly, socialised, passed on references, looked at work-in-progress and discussed critical issues touched on in seminars. Most of us were local, but one person commuted for two hours each way.

Then I undertook a PhD. This was a six-and-a-half-year venture, although I certainly had not planned it to be. To begin with, I experienced loneliness and isolation. I had just a vague idea of an area I wanted to look at, but no question. That emerged later on. I was in an individual learning relationship

with my supervisor, who was happy to talk about my work (sent in advance), on one occasion, for seven hours non-stop until the penny dropped: a fundamental theoretical and conceptual issue engaged in my mind with the actual work I was doing, and I made a learning leap (or crossed a conceptual threshold) out of the fog of incomprehension. After that, I would send chapters, drive the 120 miles to reach him, talk for an hour about the work, and get on with it. There was no email and I rarely phoned. The meetings were special and immensely supportive. When I first started, my supervisor showed me a whole filing cabinet drawer of students who had never completed. However, apart from archery, long-distance running was the only sport I ever even thought of doing reasonably well, and this, too, was certainly a long haul. Thank you Brian Lee (Nottingham University), for sticking the course!

Another thing my supervisor did was to suggest that I was part of an academic community, so I went to conferences and contacted experts. One of these experts lent me books and introduced me to his research group. Then I had friends to talk with about our writers. We punted, ate at each other's houses, passed journal articles between us and eventually, after job moves and life changes, I finished (this is still a surprise!). My external examiner was internationally renowned. He told me, via my supervisor, that I had 'passed' in advance of the viva. This was so liberating. It was the equivalent to being told, prior to my A-levels, and as part of my interview, that I only needed an 'E' to get into university. Something critical that I've learned from this is that taking the pressure off produces the best results with some tense candidates. Thank you Tony Tanner (King's College, Cambridge), my external examiner. We had a collegial, but nonetheless rigorous, hour and a half of viva, which I actually enjoyed. However, one reviewer of this book commented that this revelation is expressly forbidden in some universities and can be seen to encourage an 'old boys' club' attitude – inviting some students in but making others undergo the strains of not knowing. Recent experience as an examiner has suggested to me that while 'you've passed!' reduces anxiety, it can also lead to unstructured, incoherent discussion and some silences (for candidate *and* examiner). However, in my most recent experience as an external examiner (2011), the internal examiner and I agreed to let the student know she had passed at the outset, and that we would be recommending corrections and would like to spend the time exploring with her the work she had done. This relaxed the (international, female) student and the resulting collegial discussion was a quality experience as a result.

My own MA students were mostly local, and developed support groups. My PhD students are a mixture, all part-time, some locally based, one was located in Africa, several in Israel and the Middle East. Some are studying

literature, some women's studies, some Education/learning- and teaching-related areas.

Undertaking research means students are entering a dialogue with academic communities in their subject, and eventually contributing in the shape of dissertations, theses and conference papers. Setting up and supporting such academic communities of research learning, locally or at a distance, via email, supports learning and reduces isolation. Like-minded colleagues can act as a research group, discussing issues and work-in-progress, contributing ideas, and enthusiasm for reading and writing opportunities during and after the long slog that is data collection, analysis and writing up (see Chapter 13). With the Internet and a range of electronic communication, we can all be part of global research communities, and networking plays an increasingly important part in the developing and sharing of ideas and research, and ultimately in research partnerships, gaining and using funds, writing and producing useful research-based outputs. To that end, academics and their research students, or project groups in similar fields to those of your own students, might also be happy to discuss ideas, so putting students in touch with them can help nurture research dialogues and careers.

▶ Introduction to the postgraduate project

Postgraduate work needs to be original in some respect (see Tinkler and Jackson, 2000), although it does not have to be world shattering. Challenging, contesting and constructing knowledge are at the heart of research. Sometimes the original element of a student's research lies in the context in which the work is being conducted, the combination across disciplines or the theory which underpins the work. What is 'original' differs from research project to research project. Supervisors of scientific projects with whom I have worked, from the UK, Sweden and the Republic of Ireland, recognise that many scientific PhDs are contributions to team projects, and further a line of research rather than producing highly original work themselves. Often postgraduates imagine their MA, MPhil or PhD is a huge and unmanageable piece of work. Well, it might seem so at the start, but the main point is to see it as a 'do-able' project, and to recognise not only those gaps in knowledge (to be addressed) but also boundaries to the work. There will be variables the student will not address, sub-questions others can ask, and, depending on the subject area, action resulting from findings and evaluation that could lie beyond the frame of the research. For example, it is an important step towards managing the research for a student to realise that a

project which aims to contribute towards social change will most likely do so through other people using the research findings to instigate such change. It is highly unlikely that the scope of a single PhD will be able to do 'everything', i.e. to identify and evidence a problem (1), undertake research about ways of addressing it (2), and then address it in practice (3), and identify, evaluate or measure any change (4). There *are* disciplinary differences in what is acceptable and manageable or do-able. In the sciences, and some social and health sciences, it is not unusual to have an experimental design where a problem, question or hypothesis leads to experimentation, the design and testing of models, and producing results that feed into further work beyond the scope of the thesis or dissertation. In the arts and humanities, and some social science and health projects, there is exploration, problematising and questioning areas of knowledge in writing, music, art, history, etc., to answer specific or broader questions about values, representations and cultural contexts. Models for change would usually lie elsewhere, beyond the research itself, although in some research designs, models for change are the subjects of the study. For example, some students studying in areas of professional practice, including the health sciences, business, education, social work, education, counselling and other areas, whether their own practice or that of others, might well research the forms and effectiveness of a development or a programme with which they are involved.

Boundaries are important. Your student cannot research the whole field, everything about the subject, or all the questions that interest them so they need to identify the scope of their question, their literature and theory searching, their experimentation and data collection. They need to be flexible to some extent since what they begin to find might well shift the area of exploration, but if they are too flexible they could well incorporate too many questions, too much data, and lack cohesion and argument. Rigidity is also a potential problem. Planning a piece of work which has a rigid design, with questions to which the student already knows the answers, will probably not result in a master's dissertation of real quality and certainly will not produce a PhD. Research should be planned, but should also throw up some surprises, extending thoughts in the field in critical ways. Research projects need to steer a carefully balanced course between complying with norms of time, size, and what is manageable and acceptable, and taking risks and being creative. One of the concerns some supervisors, research leaders and managers have with the increasingly widespread expectation that a PhD will take only three years full-time, in line with funding regulations, university throughput expectations, and the shared definitions of what a recognisable PhD project is, can do, and looks like, is the potential sacrifice of the risky, the creative, the original and the truly different.

All research, and particularly postgraduate research, needs to engage with previous work in a dialogue, so that while it might start with a literature review, this should not be a dead list of summarised reading, but should comprise a dialogue between experts' and the candidate's own research. Undergraduate research also needs to be original in its contribution, insofar as students make their own synthesis of existing research and carry out their own fieldwork, experiment and analysis. The best undergraduate research is very original and creates a good basis for further research. With increases in student numbers, the length and frequency of undergraduate written work throughout the course has often tended to be reduced, making the research project or dissertation seem a daunting (lengthy) learning and writing task. However, there are other opportunities for students to develop research skills in, for example, independent learning modules, if these focus on research. Indeed, students should be encouraged to start developing sound research skills for their early essays, as these will stand them in good stead when a long and deep project or dissertation must be tackled. Ideas for and examples of ways of developing undergraduate research skills can be found in my *The Undergraduate Research Handbook* (2009).

▶ Developing and enabling supervisory relationships

Students need to be able to engage with and work with their supervisors, who are often very busy people, and who nevertheless benefit from development, experience and the sharing of good supervisory practices. Working in a research dialogue with a student, focusing on areas of mutual interest, is a most rewarding interchange, but it is also a job which, like a concertina, seems to expand. Supervisors can worry that they have not been in touch with students enough, or that they are doing too much of the work themselves – translating ideas into research activities, suggesting reading, and clarifying. Students in research methods development sessions often laugh at the idea that supervisors could do too much, but supervisors in other sessions I have run often worry that they are rewriting, analysing and doing the major thinking behind the project. It is necessary to guide students into autonomy and away from dependence. The supervisory relationship varies with disciplines, stage of the project, cultural expectations, learning differences, gender, distance and whether the student is part-time or full-time. Full-time students engaging in scientific research alongside their research group and supervisor might meet regularly for small amounts of supervisor input, a master class, monitoring and directive, but then they could find that they are not sure which parts are their *own* work, which decisions they have

made and what is more properly the work of the group and supervisor. These are issues of ownership that must be sorted out early on, so students can identify their own research progress and achieve *their* outcomes as well as contributing appropriately to the joint project.

There is now a wide literature on the varieties of supervisor/student interactions and relations. Gatfield (2005) identifies two main axes of relationships, and more recently Lee (2008a, 2011) looks at several different models of supervision. These will be discussed below. Giving consideration to the models of supervision interaction which work for you and your students is an important first step in setting up a supervisory relationship. As students and their work develop over time, however, it is useful to review the relationship, since it changes. A more hands-on supervisory style at the start of working with a research student can help support the development of a do-able research project which is accepted by the research degrees committee (or similar), and help students establish regular and sound working habits, while increasingly more 'hands-off' approaches as the work develops should help students to develop as more autonomous learners, owning their project and being aware of making their own decisions, with the supervisor providing consultation and guidance rather than dictating the work to be done (see Gurr, 2001, whose work indicates the trajectory from dependence and 'hands-on' supervision to independence). This is an ideal trajectory, however, and the learning journey is one filled with surprises, risks, excitements, wrong turns and stuck places, and shifts in the supervisor/student interaction might be needed at different stages. It is to this end that the models are explored below, since you might find it useful to change the way you work with a particular student at particular times.

Many research students work in relative isolation, especially in the arts and humanities, and if they are studying part-time or at a distance. Perhaps individual projects avoid the group ownership problem, but there are benefits to be gained from developmental dialogue with an academic community of practice, which both supports research *and* helps the development and clarification of complex conceptual ideas, through the opportunities it offers for articulation and debate. As we explore later in this book, the traditional but often now outdated isolation is lessened by universities offering learning spaces, encouraging seminars and symposia to share ideas and support development.

My international, distance-based students tend to send me 40–50 pages of revised chapters and expect immediate responses. Sometimes their English creates a stumbling block to understanding their argument. Students can phone at awkward moments with serious concerns, then 'disappear' for

months on end, unresponsive to promptings by mail or email. Students working at a distance, studying part-time, and those whose learning culture background differs from that of their supervisor, or whose English does not allow them to express all their thoughts clearly, are in a very different position from those whom we meet regularly. My master's students and I used to enjoy a study weekend away at the seaside. Apart from sharing each other's work and getting to know each other, there was ample opportunity to ask questions about their research and share research developments. None of this is on offer to students studying overseas. Clarity of mutual expectations, ground rules about regularity, the type and focus of supervisions, and agenda-setting are all essential in a good supervisor/student relationship (see Chapter 4). So, too, is the involvement of the student in a supportive academic community (see Chapter x). This is true of *all* disciplines, all levels and all locations.

▶ Quality time

Students require specifically focused moments to concentrate on the development of their individual projects. Casual regular meetings or group activities are not focused enough on the individual. For those studying part-time and/or at a distance, regular contact times should be arranged. Supervisors could ask students to send email drafts of work, and comment on these in a regular online office hour, sending back annotations and following this up if necessary with phone calls when tricky conceptual moments or learning leaps arise. For supervisors with postgraduates from different cultures, it is important that both halves of this relationship work in the context of some understanding of each other's cultures, expectations and learning backgrounds (see Chapter 12).

Supervising at a distance is a difficult skill to learn. It is preferable to meet: (1) at the beginning to clarify working arrangements and directions of the research; (2) in the middle to maintain momentum; and (3) at the end of a large research piece such as a master's or PhD. As they complete, students need support in expressing the coherence of their work; ensuring the conceptual framework is clear and that theorising underpins their work; and that theories, arguments and findings weave throughout the research as a whole, and are finally pulled together in conceptual findings and a conclusion. Students often need guidance to ensure there are clear links between chapters and good signposting throughout, so that the completed dissertation or thesis emerges as a cohesive, well focused contribution to debates in the field.

▶ Undergraduate study and supervision

For some reason that I no longer remember, I did not do a dissertation as an undergraduate, so the shock of planning, undertaking and writing a long study at master's level was considerable. Some academics would like to remove the dissertation from undergraduate courses, arguing that it carries too much weight in a degree. As someone who was not required to produce one, I disagree totally, based on my experience working with undergraduates. A dissertation offers students the chance to undertake a piece of research in an area of interest to them and to pursue it through to completion. Undergraduates present with broad areas of interest, just like PhD students. Our work together is to define a research question, provide a workable title, be exploratory and problematising, but also specific, enabling them to avoid trying to cover too much ground, too many texts and too many questions. Undergraduates are not expected to carry out quite the original, creative, problem-solving work that is expected of a PhD candidate, or at least not to the same extent. Their project is much shorter – in effect, in some instances, much more like the kind of research project you conduct in a job, during your professional life, something manageable of approximately 7000 words, with the right kind of scholarly apparatus (abstract, references, etc.) and research approach. However, now that many students are on modular courses writing only 1500–2000-word essays, a dissertation feels like a large task. It is so much more than the sum of its parts, which themselves *could* be described as four or five short essays (to let it seem manageable in terms of length). Actually, the dissertation is a conceptualised, well argued, holistic product with theories, references and themes running from the opening pages through to the final factual and conceptual conclusions. While researching for and writing an undergraduate dissertation, students develop the learning skills of problem identification and framing, question or hypothesis formation, planning a research design and actioning it, dealing with the literature, sifting it, entering a dialogue with it, carrying out the research with all the practices of time management, managing the data and theorising it, then driving through an argument in the dissertation, and writing a cohesive, well argued, sufficiently eloquent piece. An undergraduate dissertation is a first step in research, demanding the development of research and writing skills. A postgraduate dissertation or thesis is a similar product and process, but is much longer, deeper, more original and more conceptually complex.

▶ **Making it real**

Students need regular supervision to define their research project and undergraduates might need a much tighter rein than a PhD student. It is a shorter project in terms of *time* as well as length, with none of the potential elasticity of completion time accorded to postgraduate study (although this is increasingly less true as completion has become an institutional objective). Undergraduate dissertations whether in the third or final year, or in Australasia in the Honours programme, have to be carried out in less than a year, which means they must be well planned, achievable and capable of being completed quickly. For those undertaking these dissertations alongside other modules, i.e. in the UK and European systems, time management is going to include balancing with other essays and course work.

Undergraduates learn to define a realisable project for their research, to plan the timeline and to select and defend methodology and methods. They select samples and develop a research design, and learn the art of data analysis and of keeping good referencing records. They also learn presentation skills, if presenting to peers, and writing skills, including framing a question and using literature to underpin the development of a conceptual framework and theories, and to develop their own voice, finding what they have to say themselves from their questioning, work and understanding of the field. They develop good expression and coherence between abstract, introduction, chapters and conclusion. All of this will contribute towards ensuring an organised piece of work and should establish good working practices for longer projects later. Many students will produce work which is *not* staggeringly original, but it:

- should contain originality, whether this is a combination of arguments against which is set the student's own argument and discussions; a new combination of areas; a specific focus which is investigated in depth; exploration of familiar issues in a culturally inflected context or a new context; or issues and ideas explored using research approaches and methods not previously used for this area or outcome;.
- will avoid plagiarism, using the work of theorists and critics in a dialogue with the student's *own* arguments and findings;
- must contain:
  1 a question or hypothesis which problematises an area, issue, concept or field
  2 development of methods in action
  3 an argument, not just a survey

4   links between evidence and claim: i.e. no claim without evidence no evidence without a claim (relevance and coherence matter here)

5   evidence of working at a conceptual level – making meaning

6   recognition and clarification of the significance, argument and ideas in the dissertation or thesis

7   good referencing – accurate, up to date, as well as including fundamental and essential texts.

▶ The joys of supervising

Supervising students carrying out research for postgraduate and undergraduate dissertations or theses is probably the most rewarding teaching we can do. At least, I have found it so. I have met and worked with colleagues who agree with me and value this learning and teaching situation because of the mutually engaging research dialogues, the excitement of working with a diversity of students with good minds, and the sudden moments where students start to work at a more conceptual, critical and creative level, when they make the 'learning leaps' and cross conceptual thresholds. Colleagues both locally and internationally, in everyday practice, at educational development sessions, and especially in relation to the large cohort-based international PhD programme on which I worked since its inception in 1997, testify to the intellectual and professional enjoyment this work brings. I see supervision as a learning conversation. My colleagues, the programme director Dr Gillian Robinson, co-tutor Prof. Vernon Trafford and latterly several of 'our' post-doctoral colleagues, mainly Dr Shosh Leshem, Dr Miri Shacham, Dr Yehudit-od Cohen, and also Dr Yehuda Ben Simon and Dr Barak Ayalon, have all contributed to the learning conversations about supervisory practices, and the learning conversations that form supervision for us. It is colleagues at workshops and students at PhD, PrD, EdD, master's and undergraduate levels who have produced some of the suggestions about supervisory practices that form the bulk of this book. It is a truism, of course, that we learn from our students, but nonetheless true for all that!

▶ The role

The supervision role is much more clearly defined as a professional relationship, or personal/professional/political relationship, than that of tutor, friend or colleague, and it relies on more than goodwill and spare

time. It needs to be, and in many cases is, the focus for development and 'training', although I don't like the mechanistic overtones of that term. Students at all levels need guidance, modelling and managing so that they can start to develop as independent researchers. This seems to require a mixture of the specialised, developed skills discussed above – developing reliable research questions; conceptual frameworks; methodology and methods; and the analytical skills and tools to analyse and interpret find- ings to enable the research to come to organised fruition; ability to support developing writing skills; and people skills. We will consider here generic research supervision at undergraduate and postgraduate levels, using postgraduate practices and perspectives as fundamental underpin- ning models. We will look at various research-based interpretations of the role and in so doing we will also look at interpersonal skills. However you manage your supervisory role, time is always an issue. Colleagues with whom I have discussed supervision confirm my own sense that we are always expected to 'tuck' supervision into an otherwise crammed sched- ule, and so are in danger of ignoring the very systems and practices of teaching and guidance it requires. Currently, increasingly driven by government objectives and quality assurance demands, the role needs to be clarified and supported by explicit development, recognition and reward. This is particularly so in Australasia, where postgraduate supervi- sory practice development is now increasingly compulsory, possibly because funding is attached to postgraduate completion (students are funded from the outset, but their completion feeds into funding a formula for future students, each completion being worth approximately 50 per cent for a new student). It is also increasingly so in, for example, Malaysia and South Africa. Here, growth in postgraduate numbers and the growing of research as an essential element in all curricula are seen to support investment in the contribution of research to both social justice and the knowledge economy. Many historically under-resourced or differently focused countries are growing their student and supervisor numbers rapidly. Research development needs supervisors and supervisory devel- opment. Supervisory development enables us to discuss and adopt good practices (and avoid replicating the horror stories from which we have learned), which we share, and so can develop good practices in a variety of contexts. These feed into all of our supervisory work, at every level. We can also now benefit from a growing research base. The next sections look at research into supervisory practices, models, and supervisor devel- opment programmes.

▶ Tensions and developments in postgraduate research and its supervision

> At the start of a doctoral supervision I make a point of underlining the possibility of failure. It has to be crystal clear that enrolling (even as a well-qualified student with a good master's degree) as a doctoral candidate has no implications for success either with the thesis or on the job market. Hard facts but honest ones. By definition, there can be no guarantees that a project will produce an original contribution to knowledge. Society needs a contingent of people who have understood that ideas cannot be bought, and who resist the creeping managerialism besetting intellectual inquiry. Putting 'pure research' (the quest for knowledge) first is not the product of an ivory tower; it is deeply political. If we are to be defined only in terms of the needs of one profession, how can change occur? How will old injustices and prejudices be overcome? Great research is original, challenging, and the product of minds able to see beyond narrow, pre-set goals. The current trend towards managing research (in theory, only its infrastructure and resources) has already led to a preference in the funding bodies for neat, well-planned projects, commercially contracted in advance, as opposed to 'blue skies' research. (Newman, 2001, p. 16)

Newman's comments on the dangers, tensions and social context for research students in English spell out issues for all disciplines. A manageable piece of research might be produced at the expense of real creativity and contribution to knowledge. Students can fail. Debates about supervisory practices and their development are located right at the centre of such tensions.

Key issues when we consider research supervision are the nature of the research process, the aims and scope of the research itself, and the student's own self-development. Here, a major tension emerges between the managed and manageable piece of research and the creativity, arguing and space to make mistakes and learning leaps that the research experience offers.

Leonard (2001, p. 39) acknowledges the tensions between the usefulness of postgraduate training courses, ICT to aid doctoral learning and supervision, and the current over-bureaucratisation of the supervision process – a possible problem for developing a creative atmosphere. Of importance here is the argument that the culture of emphasising completion could lose us the exploration, creativity, problem-solving and sheer originality of research, especially at PhD level. However, my own work on the 'good enough PhD' (2010) emphasises the importance of establishing and sustaining the right

balance between a manageable project, in the time available, and the essential conceptual, critical and creative work for research achievements at postgraduate level.

In the UK, the Economic and Social Research Council's (ESRC) pressures to complete match those in Australia and New Zealand to link funding to completion: 'a powerful mechanism for research steerage' (Ozga, 1998). This could lead to a different kind of thesis at PhD level, one which could be more time-managed, feasible, boundaried, planned and achieved – but *alternatively* could be less creative and less involved in risk-taking or originality.

> The PhD thesis used to be conceived as a major piece of work on which authors could draw for their first monograph and several important articles. Increasingly, however, even in the humanities (where the AHRB [Arts and Humanities Research Board] has still not made a requirement for taught courses), all doctorates are becoming 'Kentucky fast research'. That is to say, they 'should' all now be pitched at a 'manageable level', with the capacity to succeed under pressure, and time management, of paramount importance – rather than a PhD at least tackling an issue of importance to the discipline and the individual student, however long it takes. In the natural sciences, more original work has always waited till postdoctoral level, but research here has been steered towards 'more boring but patentable paths'.   (Power, 1997, p. 100)

The conveyer-belt version could threaten creativity. However, these are the funding mechanisms within which we are now working, so we need to both balance the creativity and conceptual work with completion, ensuring our students do complete in a timely fashion, and enable our students to see and articulate the many skills they develop during research so that they are aware of being on the one hand more marketable, and on the other more rounded people as a result of their research completion. Students are now being more explicitly encouraged to see even the PhD as an opportunity to develop a wide variety of research skills for future use in researching and other areas of professional practice. They need to be aware of the research skills they are developing, whether these transfer to an academic career or another career, perhaps professional, vocational, or to their general enquiring approach to experience after graduation. Vital elements of the development which is part of being a PhD student are:

> learning to exercise disciplinary judgement, that is to say acquiring the academic equivalent of 'good taste': knowing when an experiment has 'worked', how best to gain access to a research site, how to evaluate

sources, how best to choose theories and critical cases, what there is to be seen in the data, when a reading is plausible and an analysis correct, how to construct an argument, and how to write and present a good paper. (Leonard, 2001, p. 41)

Supervisors play a key role here. Modelling, advising and supervision are part of our own development process:

Newcomers need neither to be left to reinvent the wheel nor to have didactic teaching. Rather they need a practicum, with supervisors who can demonstrate, advise, observe performance, detect errors of application and point out correct responses. This is the induction which students find exciting and the reason why they submit to many years of (often unpaid) work. It is also why it is essential for academics to combine teaching and research – not to acquire a knowledge base, but to have a feel for the process of construction of disciplinary knowledge.   (Leonard, 2001, p. 42)

Cramming the PhD into only two or three years of work could result in the loss of a creative element. Leonard and others suggest that important post-graduate research skills could be learned either in a period as a postdoctoral student, as in the sciences, or in an initial period of employment before 'tenure' is granted, as in the American system. Alternatively, the widespread development of the master's in research (often an MRes) could enable students to learn skills before embarking on a PhD. Some supervisors of research argue that instead of enhancing research, the focus on skills could result in a decline in research standards. Imaginative solutions to this dilemma include, for example, the University Research Training Framework at the University of Brighton, where students undertake modules in generic skills, research methodologies, and in developing teaching skills, and also have discipline-specific modules which focus them on the demands of their differing disciplines in terms of what counts as knowledge and how it is discovered, contested and constructed in their discipline.

People undertake research for a variety of reasons. For many undergraduates it is a compulsory part of their degrees; for some postgraduates it is an opportunity to engage in work that informs their professional practice. For many, and this is not mutually exclusive, it is a chance for personal growth and intellectual development.

So why is research worth the effort? Undertaking research in any subject consists of problematising whatever is given, putting enquiry into action and learning how to develop an evidence base for knowledge claims and contributions. Research is *the essential learning process*, cast of mind and set of skills.

Current concerns worldwide about the kind and quality of the doctorate have led to some tightening up of the articulation of what a student might reasonably expect from the research study experience, and its outcomes. The UK Quality Assurance Agency (QAA) has issued an informative piece in this respect and suggests that students undertaking a doctorate need to ask themselves about the quality of supervision, institutional provision, and wider development, as well as the likelihood and kind of employment after they achieve their doctorate. They suggest students ask the following questions about the doctoral experience at their intended university:

Questions to consider before taking up doctoral research:

1. What does the institution expect of its research students in terms of time spent researching, undertaking training or attending 'taught' elements, and other responsibilities?
2. What facilities/resources am I likely to need for my project and will I be able to access them?
3. What costs am I likely to incur that are not included in the annual tuition fee (such as travel for research purposes, or specialist equipment)?
4. How will I be supported in finding opportunities to attend conferences, give presentations and publish?
5. Will I be given opportunities to teach, and if so, when and how much?
6. What support is available (in my subject) for research and transferable skills development?
7. How does the institution promote an engaging and interdisciplinary postgraduate research environment?
8. How are the concerns of doctoral students represented to the institution?
9. What provision is there for arranged suspension of study (for example, for parental leave) and will I be able to return to my research if I suspend my study for some reason?
10. What happens if I don't complete my thesis?
11. What employment opportunities are available for someone researching in my field?   (QAA, 2011b, p. 10)

These are all issues and practices we need to take into account as supervisors, always recognising that we cannot ourselves provide all of the support and all of the answers but that other colleagues round the university should be available and expected to do so. Students are more aware of their needs and rights, and more articulate about these now than twenty or so years ago,

and it is crucial for their success and the success and future effectiveness of research in our national and international contexts that the university, supervisors and the students unite to ensure that this is a positive and fruitful doctoral experience leading to appropriate use of the research and skills learning, in the future.

▶ Different sorts of supervision for different disciplines and learners

Supervising research demands that we too, as supervisors, develop a range of research-related and interpersonal skills: we must align our practices and learning behaviours with those of our students, nurture, prod, push, support, encourage, insist and guide them, and then encourage independence. It's a tough job, but endlessly rewarding.

Delamont et al. (1997) note that all supervision is a self-conscious rather than intuitive activity: 'good, pleasurable supervision is based on self-consciousness, not intuition or flying by the seat of your pants' (p. 1). Supervising is partly a set of skills that can be learned and improved with practice. Like other studies suggesting good supervisory practice, the Delamont et al. study arises from research, the earliest example of which was the Spencer Foundation's 1987 three-year research programme in five countries (Clark, 1993). In taking into account the effects of mass higher education, the labour market demand for advanced education, knowledge expansion and an increased government role in the patronage and supervision of research, Clark (1993) discovered greater similarities within than between disciplines in terms of supervisors' needs, despite national differences. In effect, Japanese historians had more in common with the ways other historians went about their research than they did with Japanese biologists, for instance.

Clark argued that 'the future of British academic science is quite problematic' (1993, p. 369), because the 'tension between university and state is great' (p. 369). Becher et al. (1994), contributing to a book on global aspects of research in graduate education (Clark, 1993), went on to publish the British chapter as a separate monograph. Following concern about poor completion rates (Blume, 1986, pp. 217–22), the British ESRC launched a research initiative on the social science PhD (Burgess, 1994). Two ESRC-funded projects on science PhD students and their supervisors followed, so that by 1995, the UK had developed a substantial body of data on doctoral study.

International comparisons reveal differences in postgraduate education:

> France has the CNRS system, as well as the 1984 reform of the doctoral
> degrees, which led to the single doctorate followed by the *habilitation*. The
> USA has the largest and most diverse system.   (Delamont et al., 1997, pp.
> 8–9)

However, the overwhelming effects of supervisory cultures and provision for
research are more significant than national differences.

> The supervisory cultures and the existence or absence of a laboratory
> setting for research are more important for the life of the individual
> student than the particular nation state, despite Traweek's findings on
> physics.   (Traweek, 1988, in Delamont et al., 1997, p. 9)

Different disciplines might demand different kinds of research paradigms
and behaviours (Conrad, 1999). Parry et al. (1992) note that anthropology
students require immersion in the field, while Gumport (1993) and Becher
(1993) indicate that historians are expected to be independent practitioners,
in contrast with students in the physical sciences. Acker, Hills and Black
(1994) use interviews with supervisors and students to define strategies and
styles of supervision contributing towards students' successful research
practices and completion in relation to disciplinary differences, considering
different stages of supervisions and matching different stages of the
students' work. Acker et al. (1994) comment on the social sciences alone,
considering two subjects, education and psychology, in three different
universities, which conceptualise knowledge and ways of undertaking
research in their fields in rather different ways. They also suggest two
modes of supervision: 'The *technical rationality* model gives priority to issues
of procedure or technique, while the *negotiated order* model conceptualizes
supervision as a process open to negotiation and change' (Acker et al.,
1994, p. 483). These are based on contrasting beliefs about learning and the
student/supervisor relationship. Of the 'technical rationality' model they
say:

> The PhD can be either a training exercise or an original contribution to
> scholarship; the student an apprentice to a faculty member or an indepen-
> dent scholar; the goal scholarly creativity or speedy completion. The
> discussion to follow considers another such tension.   (Acker et al., 1994,
> p. 484)

In contrast to the 'technical rationality' model:

> The *negotiated order* model, alternatively, derives from the interpretive or interactionist approach to organizational cultures and the student career in higher, usually professional, education (Becker, 1970; Oleson and Whittaker, 1968; Strauss and Corbin, 1990; Woods, 1990). Actions of students and supervisors are based on perspectives derived from their past and present experiences, interactions with others, and interpretations of situations. Situations are characterized by uncertainty, uniqueness and value conflict (Schön, 1987, p. 6) making the application of technical rational solutions unrealistic. Mutual expectations between supervisors and students are subject to negotiation and change over time. The student, like the supervisor, participates fully in negotiating and interpreting meanings.   (Acker et al., 1994, p. 485)

Built on emotional intelligence, differing from more didactic, scientific, established methods, the model is more natural to and possibly best suited to professional interactions possible with students who are career professionals themselves, or likely to move into professional roles.

Acker et al. (1994) scrutinised 67 students' transcripts, 56 supervisors and those of 14 other related persons, such as administrators, tutors in charge of research, heads of departments and secretaries. They found differences of opinion and experiences with regards to stock elements of supervision ranging from: (1) tutorials where agendas were seen as set by students or supervisors *or* as negotiated; and (2) work consisting of reporting or guiding or nurturing. Several students found it difficult to take responsibility in tutorials. There was enough agreement as to the conduct of a good tutorial to provide academic guidance on running one.

Different supervisors had style preferences. Some were directive- and task-oriented; some seemed too busy to give the time to the students. Supervisors saw students as differing in the amount and kind of direction and supervision they needed, some modifying practices after the ESRC's directive on completion.

Dimensions of the relationships between supervisor and learner were also discussed. Some supervisors preferred to be close, inviting their student to dinner, having international students to stay for Christmas, for instance, while others retained a distance. Students responded to differences in supervisors by adapting their own styles (although some could not):

> Several students indicated that infrequent supervision had taught them how to be assertive, perhaps seeking help elsewhere, or to be better orga-

nized. Some thought that their supervisor had intended this outcome. (Acker et al., 1994, p. 494)

One major problematic issue indicated in the study is that supervisors who are pressed for completion rates move towards the 'technical rationality' and directive models, while most have been seen to prefer to work in the 'negotiated order' model, and indeed this latter model seems to better fit the demands of a broad range of supervisors and students.

Kiely (1982) and Bargar and Duncan (1982) argue that supervision should be devoted to the fostering of student creativity. Doctoral research should be a 'lived, integrated experience of creative problem-solving' (Kiely, 1982, p. 5). The supervisor's task becomes one of facilitating rather than directing. Blanton (1983) terms this 'midwifing the dissertation'.

Burgess et al. (1994) suggest that the business studies supervisor was likely to start out as 'project manager' and end up as a 'critical friend'. Some researchers indicate that more 'direct' supervisions get good results, while others prefer negotiation. Culture, discipline, study stage and personality probably play equal parts in this. Wright and Lodwick (1989) use factor analysis for interviews with 43 supervisors to identify six styles of supervision, finding that supervisors who were 'outstanding' in terms of completion rates used 'intellectually nurturing' and 'flexible' styles – negotiated, flexible styles moving between the directive and the nurturing at different times have more likelihood of enabling students to work towards completion. Certainly this claim fits in with the supervision paradigms which I and colleagues (Wisker, Robinson, Trafford, Warnes and Creighton, 2003) have discovered in our own work with cohorts of Israeli PhD students. Whether supervisors are acting as midwives, critical and creative friends, managers or directors will affect the differing work responses of students, but so too will the students' kinds of research. Recent studies (Brew and Peseta, 2004) identify a range of styles accompanying different stages in the student's work, as much as differences in disciplines.

Delamont et al. (1997) highlight clashes:

1   students needing more carefully organised direction when a supervisor has a more casual approach
2   supervisors feeling that students need their hands holding while they should be encouraging independent thought.

Apprenticeship models, more common in the sciences, probably encourage less initial autonomy or questioning of authority in the student. It could be argued that some international students, for instance, expecting the apprenticeship model and finding a 'negotiated order' model, would need

careful induction into the very different kinds of expectations and interactions it encourages. More recently, Gatfield's work (2005) develops several supervisory models. Gatfield (2005) reviewed supervisory styles and concentrates on two dimensions of 'structure' and 'support', identifying four supervisory styles:

- **Laissez-faire** (Low Structure – Low Support). This style characterises supervisors as playing a minimal role in the organisation and management of the research project and in the provision of support, these being seen as matters for the candidate to address.
- **Pastoral** (Low Structure – High Support). This is characterised by supervisors who see themselves as having a significant role to play in providing pastoral support and resources, but leaving the candidate to manage and organise the research process.
- **Directional** (High Structure – Low Support). This characterises supervisors as seeing themselves as playing a significant role in organising and managing the research process, but leaving the candidate to arrange personal support and resources.
- **Contractual** (High Structure – High Support). This characterises supervisors as playing a significant role in both organising and managing the research process and in providing support for the candidate.

Along this continuum there are many potentially successful matches and an equally large potential for mismatch. It is the mismatches that result in unhappy students and non-completed work. Looking at power bases of relationships between master's students and their supervisors, Armitage has proposed a continuum 'of task/process centred concerns and directive/non-directive supervisory roles' (2008). His model moves from power-centred to facilitation-centred supervision and considers the different issues and problems that could arise in a student's work, and how the supervisor as facilitator or power and authority-centred might tackle his or her advice to, and interactions with, students.

   Considering the range of relationships, Anne Lee has more recently developed another series which maps the supervisors' beliefs about and behaviours in research with those of the student and the project. Her research has involved working with this model in supervisor workshops, even as my own research has been used. My research involves meta-learning (Wisker, Robinson, Trafford, Creighton and Warnes, 2003), communities of practice (Wisker, Robinson, Trafford, Warnes and Creighton, 2003), and, latterly, the 'nudging' of supervisors to enable students to cross conceptual thresholds in their research (Wisker, 2010, 2009a).

Anne Lee has established a frame of interactions for supervision, which is helpful in identifying the different practices suitable at different stages, with different students and different projects. Lee's framework develops from her work in researching conceptual models used by academics who supervise (Lee, 2008a, 2008b). It builds on Brew's work (2001) on variations in approaches to research, and more widespread research on variations in learning (Entwistle and Ramsden, 1983). It's a developmental framework, she argues, since it moves beyond the merely functional approach in time. Lee argues that the 'outstanding' academic can move appropriately through all five approaches. These approaches can be seen on an axis between:

PROFESSIONAL ————————————➤ **PERSONAL**

The different modes are:

Functional
Enculturation
Critical thinking
Emancipation
Relationship development
Lee (2008)

Although Lee has called my approach in the first edition of this book largely 'functional', I find my approach more of a mixture, depending on the student, the project, and the stage of the project. Her five dimensions are most helpful in mapping onto my own concerns with setting up good working relationships and ground rules (Chapter 4), encouraging and enabling students to enter the dialogue with the literature (Chapter x) and the discourse community of their discipline at this level (Chapter X on writing), the development of increasing autonomy and ways of dealing with tensions and inequalities, merging into thinking about interactions and differences (Chapters x and xx) and the conceptual threshold-crossing research and supervision nudging (Wisker, 2010). Each takes a critical thinking approach. For me, the functional approach suggests we as supervisors need to know the rules and regulations, time available to conduct the research and write the dissertation or theses, mitigating circumstances, withdrawal and intermission rules, length and layout rules. We support students in planning and managing their time and their construction of the proposal, the project design, and the conduct and writing of the research. In the model I have developed from earlier research I identify three dimensions:

Personal
Learning
Institutional

The functional approach enables the supervisor to act as a bridge between the institutional requirements and the creative planned work of the student, so that timely completion and a sound, well written project can result.

I think being functional is essential for a structured and fair supervisory engagement, but then the other dimensions of Lee's model are also important.

Lee's dimension of critical thinking aligns itself with the 'learning' dimension above, and later chapters explore ways in which we, as supervisors, can help 'nudge' students to engage with the research question, the literature in a dialogue, and with producing critical, conceptual and creative work adequate to or exceeding that expected at the level at which their project is pitched. Elements of engagement would involve challenges, and, I would argue, the encouragement of risk taking and dealing with disasters, as well as the building of informed confidence and competence to challenge orthodoxies with theory, practice, evidence and argument. This builds maturity. The dimension of relationship-building considers becoming a team member and practices of support and modelling. For me, the relationship between student and supervisor is one which is ideally well grounded in mutual understanding and clarity of expectations and boundaries, and which operates as a personal/professional/political mix so that the care for and about the students and their life, as well as their work, never overwhelms the professional relationships intended to help model, and enables the student to enter the academy as an equal in due course. I compare it to a dance, matching different behaviours, learning approaches, and stages of the project, where each person needs to be sensitive to differences and changes, some of those conditioned by culture and some by the culture shock of moving into a range of new cultures of level of work, kind of project and kind of supervisory relationships, and increasingly, difference in cultural background.

Lee talks of the enculturation approach, and also of emancipation. I should like first to take these separately, although I believe they are related. The emancipatory approach involves mentoring, supporting, and enabling growth. It aims at empowering students to develop as independent researchers, but avoids the problems of differing approaches embedded in Gurr's (2001) supervisory alignment model, in which there can be a mismatch at some stages of a student and supervisor relationship, where a hands-on supervisor meets a hands-off or competently independent research

student, or where a student who needs structure and hands-on support meets a supervisor who believes leaving students entirely to their own devices, in some magical way, helps develop independence. The first controlling mismatch could undermine students' development of autonomy, and cause frustration and a limitation on their project and their skills. The second can lead to what is generously referred to as 'benign neglect', where, in our work on doctoral 'orphans' (Wisker and Robinson, 2011) reported later, we have found students who are anxious, struggling to work out why their supervisors are never in touch and in some cases have left the university. Neglect does not necessarily lead to resilience and success. It can be the end of a student's self-confidence and ability to plan and work.

The enculturation approach recognises that academic disciplines have their own discourses and their own constructions of and contestations of knowledge, their own forms of expression and even shapes to a dissertation or thesis. In recognising this latter we would expect students to understand that an arts practice or performance piece would see the production of the artwork and performance as a major part of the research work, and would accompany a product or artefact with the articulation and communication of the theorising, the research exploration and conceptualisation, and the understanding of what the work and its process have been able to contribute to the field and to knowledge. The demands on this expression and the form in which it is expressed will look much the same as for any other thesis or dissertation, except that the engagement with and articulation partly through the artwork or performance adds that extra dimension. Similarly, an engineering student might well also build a product and have to explain the challenges, risks and process, and theorise the product in relation to the hypothesis or question. Disciplinary differences affect modes of constructing and challenging knowledge, discourse, habits of referencing, and even the size and shape of the thesis or dissertation. Recognising supervision as enabling enculturation means that as supervisors we can help induct students into some of the often more esoteric and strange language and practices of our discipline. It also, however, raises the kinds of issues of power, hierarchy and gatekeeping which enable some students to enter and flourish and others to feel forever outsiders, without even the power to challenge what is perplexing. Some elements of this relate to students' abilities to mimic the language and the approaches needed to gain entry into the research world in this discipline, and some are aligned with the problematics of cultural difference and/or the master–slave relationship of often unacknowledged power, which Manathunga (2007), and Grant (2003) identify.

Some enculturation is necessary for success, but the rules of engagement should be transparent, discussed, shared, negotiated and problematised. You

might like to look at Lee's full map and consider at what point and in what context you engage with the different supervisory developments. Like our consideration (Chapters x and xx) of roles and dialogues, this mapping provides an opportunity to develop a supervisory 'repertoire', which means we can be flexible as well as fair when a student needs change in different stages of their work and contexts. Enculturation, relationship and issues of power combine as we consider supervision as a contested space, an approach increasingly popular as the cosy dyad of supervisor and student becomes more open to examination and questioning.

▶ Supervision as a contested space: tensions and issues in supervision

Much work on supervision takes a very liberal approach to the interaction. More recently there have been some critical responses to this, which indicate a recognition of the ways in which claims of such liberal interaction, based on a kind of collegial equality, are actually hiding a relationship of power, resembling what Manathunga and others have called a destructive relationship. Clearly, identifying this is problematic and cuts to the heart of assertions about best practice, particularly in a book like this which attempts to engage with perceived good practice that enables students' development, research, and achievement in a variety of contexts and interactions.

However, the subtexts of more authoritarian power-orientated practices need exploring if we are to recognise them, whether they are intentional or not. We can then find ways of dealing with them, should we believe, as I do, that practices which insist relentlessly on power or control are less likely to enable and empower students to become independent thinkers, researchers and contributors to knowledge. This is quite apart from the inappropriateness of a kind of imperialistic behaviour which insists on hierarchical layers. However, having made that rather politically correct statement, I am more than aware that my own role of power as a supervisor could indeed be inadvertently read as controlling, preventative, and imposing a version of research and construction of knowledge. It is these subtexts, this inadvertent script, which Manathunga and others are exposing, as much as the overt power relationships in a supervisory relationship probably based on a historical notion of expert and novice.

Moving on from the recognition that supervision derives from the one-to-one Oxbridge tutorial, Manathunga casts light on the 'private space' (2005) of supervision and exposes the power relationship embedded in these relationships, even with the best intentions. She:

applied Devos' investigation of mentoring to postgraduate supervision to highlight the work that mentoring does as a form of academic and disciplinary self-reproduction that can have paternalistic impulses located within it. In particular, I argue that supervisors need to be conscious of the operations of power in postgraduate supervision despite their best intentions.   (Manathunga, 2005, p. 207)

Manathunga questions any neat version of mentoring, exposing the dual position of being a developing subject and one who is acted on, developed, and embedded, in Anita Devos' work (2004). Like Barbara Grant, who defines supervision: 'Supervision is such a challenging and "chaotic" pedagogy' (Grant, 2003, p. 189), Manathunga and others go on to explore what could more appropriately be exposed as a 'master–slave' relationship than that of equals, since the institutional power (even if not all the knowledge) lies in the hands of the supervisors, however seemingly equal the relationship is. We will return later (in Chapter 8) to consider supervisory roles and supervisory dialogues.

Both research and supervision are becoming more professionalised in practice. As students are increasingly expected to undertake research training and development (see Chapter 3), it is not surprising that universities expect supervisors to engage with support and development programmes, and to become more reflective and professional in their roles. Increased research student numbers and national pressure to improve completion rates have all contributed towards the innovation and enhancement of supervisor development programmes. The next chapter explores and discusses some of these programmes with a specific emphasis on programmes in Australia and the UK, and on my own supervisor development workshops.

▶ Further reading

Armitage, A. (2008) 'Power Relationships and Postgraduate Supervision', Chartered Quality Institute, online at www.thecqi.org/Knowledge-Hub/Resources/Journal-of-Quality/Past-articles/Power-relationships-and-postgraduate-supervision/

Delamont, S., Atkinson, P. and Parry, O. (1997) *Supervising the PhD: A Guide to Success* (Buckingham: Open University Press).

Gatfield, T. (2005) 'An Investigation into PhD Supervisory Management Styles: Development of a Dynamic Conceptual Model and Its Managerial Implications', *Journal of Higher Education and Policy Management*, 27(3), 311–25.

Grant, B. M. (2004) Symposium Session 'Masters and Slaves: The Twisted Dialogues of Supervision', University of Auckland, Aotearoa, New Zealand, in M. Kiley and G. Mullins (eds), *Quality in Postgraduate Research: Re-imagining Research Education.* Proceedings of the 2004 International Quality in Postgraduate Research Conference, Adelaide, Australia, 22–3 April.

Lee, A. (2008) 'How Are Doctoral Students Supervised? Concepts of Doctoral Research Supervision', *Studies in Higher Education*, 33(3), 267–81.

3 Supervisors and sustainability: working together in supervisory teams, networks, fora, communities and development programmes

There are many aims which guide our supervision of undergraduates, post-graduate students and researchers, one of which is the development of the individual researcher, another the completion of a project which can make a contribution to knowledge, and another developing research communities that build research capacity and can be sustainable. Chapter 10 will focus on developing peer-based communities of practice amongst students, which help sustain them through their research learning journeys. This chapter considers supervisor identity, balances and development, and looks at ways in which developing supervisor communities through teams, fora, networks and development programmes can also improve supervision experiences, and help build research capacity and sustainability. Much supervision in the UK and elsewhere was built on the 'secret garden' model (Park, 2005), keeping the relationship between supervisor and student a private one, somewhat removed from the larger collegial community, and essentially 'untrained'. A new transparency, rigour, and changes in funding have all made a difference to our articulation of the supervision process, and our strategies for evaluating and enhancing it. Funding has played a large part in sharpening the focus. The policy in Australasia for several years now has been that postgraduate funding for universities is released upon completion rather than registration of their studies. Failure of students to graduate 'on time' (usually 3–4 years for full-time students) compromises the university's ability to make offers to new students and receive funding to support them. Following the

Roberts Report (2002) in the UK, and subsequent funding for student research development programmes, increased transparency and account-ability have focused universities on supervisory development, professional updating, and more rigorous management of supervisor-student expecta-tions and interactions in order to ensure parity, a better research learning experience, and more likely successful completion. Park tells us that the UK model is more relaxed, less rigorous than that of, for example, Japan, where only a select group of supervisory experts are allowed to supervise (Powell, 2006): 'Now, it must be aligned with the precepts of the QAA Code of Practice (2004), which among other things expects institutions to have clearly defined roles and responsibilities of both supervisors and research students, and clear criteria for defining who is eligible to act as a supervisor' (Park, 2007).

In the UK, publications (e.g. the Metcalfe Report, Metcalfe et al., 2002) shifted attention to the need for development programmes and opportunities for supervisors to focus on improving research supervision so that research students can benefit and, hopefully, complete in greater numbers. There is a shift in emphasis to empowering and enabling postgraduates, often termed 'early career researchers', to develop research skills which will inform their researcher identities throughout professional life. Alongside this develop-mental focus is one which encourages and insists on the *ongoing* develop-ment of supervisors, and so both encourages professional practice and reduces the often worrying isolation we might feel as supervisors. There are many self-help books available (including this one) and, as supervisors, we can also benefit from developmental programmes which can lead to enhanced professional practice and a better experience for both supervisors and research students.

This chapter considers:

- *Supervisors' identities and balances*
- *Supervisor development programmes – workshops and online*
- *Developing and sustaining supervisory teams, networks and fora*

Some of us come to the supervisor role quite late in our professional lives after we have taught undergraduates and worked with individuals and groups, and some of us find we are supervising undergraduates while we do our master's, and master's students while we do our PhDs. Universities who are building research capacity often expect young researchers and newer

staff to undertake supervision, and this is probably best done in a team or paired supervision, so that the more experienced supervisor can help mentor the new supervisor. We explore mentoring through co-supervision, working in teams, and working with new supervisors, in later chapters. Being a supervisor is a complex, professional, personal and political role and one which is not merely about mimicking the ways in which we ourselves were supervised, since each student and their project is different, and likely to present both some similar issues through the stages of their research and writing, and some very different issues with which we will have to deal. There has been a surge of research and reconsideration of the role and a developing focus on academic identities. In workshops, I have looked with supervisors at supervision as the development of early career researcher colleagues, and at issues of balancing their various roles with their supervisor roles. We have considered the challenges and joys this role brings. Issues of balance include those of wellbeing and emotional resilience, which we have been exploring (Morris and Wisker, ESCalate-funded project, University of Brighton, 2010). Much of the research on academic identities focuses on the full professional role and its variations.

However, there is still little written on the supervisor identity. An exercise I conduct in supervisor development workshops asks supervisors to consider their own balancing of the academic role and finding a place for supervision to support the role and minimise tensions. Giddens (1991, p. 5) reminds us that identity is a 'reflexive project' that involves 'the sustaining of coherent, yet continuously revised, biographical narratives ...'. It is a 'becoming', and engaged and defined both with and by community and practice. There is a 'profound connection between identity and practice' (Wenger, 1998, p. 149). We define who we are through negotiation and reconciliation of multiple trajectories related to our varying positions of membership of multiple communities.

Becoming a supervisor also entails adding the supervisor identity into the rich balance of discipline specialist, teacher and facilitator of learning, researcher, contributor to university and community service, possibly manager and course leader, as well as into the rest of your life. This entails reflection and developing a balance between the expectations of the different roles, and also a recognition that being a supervisor actually involves you in a role which is itself in balance, since our interactions with our students are more individually learning-oriented than they might be with a single undergraduate or postgraduate in a large class. It is a relationship which engages the personal/professional, and the political (in terms of university regulations, etc.). Balance is important to our supervisor identity.

Activity: Academic identity as a C21st academic/professional/researcher/supervisor

Briefly, please consider the various versions of your identity, of demands on your time and of balances:

- Who are you right now as an academic, a professional, a researcher, a supervisor?
- What identities have you had?
- What choices have you made to bring you here?
- What are the professional identities you are balancing?
- What identities are challenged and which negotiable?
- How do they overlap?
- Where are you going as an academic, researcher, professional, supervisor, in context?

Teaching and supervising

University business and other service managing/admin/ meetings/social justice and community engagement

Researching/writing
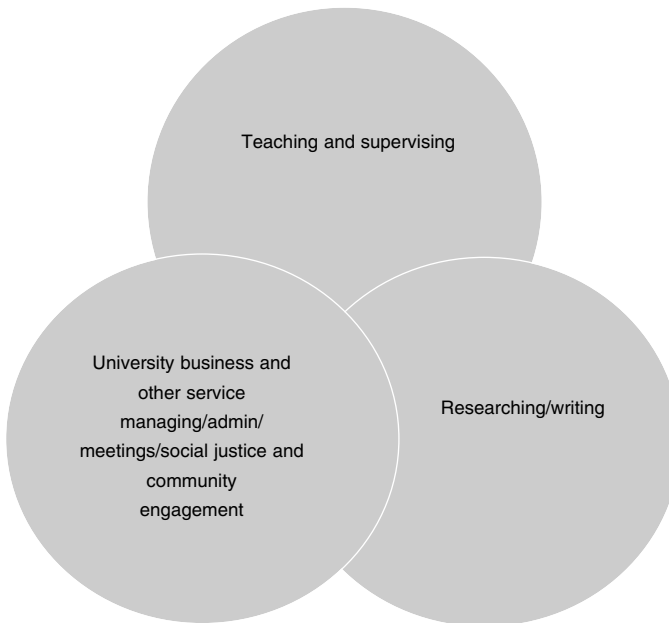
FIGURE 3.1

The supervisory role is demanding and needs to be seen in relation to your other roles. It overlaps with other teaching, with research, and with institutional roles, and it also overlaps into the rest of your life to some extent. While seeking a balance in work and life is important, not every-one's balance is the same, and you might realise that other elements of your life, for example, the social, networking, and hobbies or other activi-ties, are actually linked to research networks. Researchers and supervisors could find intellectual friendships related to research, which enable us to keep in contact with, co-research and co-write with colleagues all over the world. Our research and supervisory interests encourage us to establish contact through conferences, augmenting and extending these contacts through email and Skype. Such networking is helpful for ourselves in developing and maintaining research communities, and is also helpful for our students, as we can put them in touch with others in close and related fields.

Balancing supervisor identity and your other professional identities will also have an impact on the rest of your life. You will need to consider issues of balancing time for your own research and writing alongside supervision. What tends to cause stress for academics is not so much the over-work, but the unexpected imbalances: too much administration when you expected teaching and research, too much teaching when you expected research and administration, and so on. Being aware of how the roles change, the amount of time supervision takes up, how much the research can elide with and align with your own, not letting student needs and contacts invade too much of your own research and other time – all of this is important in ensuring a supervisor's life is manageable as well as balanced.

▶ Supervisor development

Supervisor development programmes are still relatively new in some universities, while in others they are embedded, compulsory, and delivered as workshops, online courses, or face-to-face modules with assessment – or a combination of these. Such development recognises the need to scope the role and consider how it relates to the rest of our roles, and how it can be effectively managed. Increasingly, colleagues ask questions about balancing relationships and sharing responsibilities within teams of super-visors. Metcalfe et al. (2002) identify the proportion of UK universities training and developing supervisors, insisting on the improvement of the extent of provision, while recognising institutional differences:

Training should be specified by the institution and compulsory for [new] supervisors. All supervisors, whatever their level of experience, should have regular training.

> 57% require training of new supervisors
> 24% require training for all supervisors.
> (Metcalfe et al., 2002, p. 46)

They suggest that institutions should 'Specify the means by which a supervisor can seek independent advice on supervisory issues, especially if they have concerns about a student's ability or application to the study programme' (Metcalfe et al., 2002, p. 46).

As professionals, supervisors can benefit from development models enabling the sharing of good practice. Workshops, accredited programmes, online support and opportunities to enhance practice using narratives are the models favoured by UK, Australasian and other colleagues. We will explore examples of each.

This next part of the book might be of particular use for academic or educational developers who are putting on courses, because it offers an example of a programme for supervisor development.

I have run a number of traditional workshops on postgraduate supervision (see the boxed example of a three-day programme held at the University of the West Indies, 2003–2010). At such workshops, colleagues from a variety of disciplines, some very experienced, some relatively new to supervision, work together to explore case studies, exchange good practice, and consider ways to enhance their own supervisory practice. I wish to thank them and workshop colleagues from other universities for their insights.

Programme Example

PhD Supervision: A Supervisor Development Workshop
Professor Gina Wisker PhD

Day 1
Establishing good supervisory practices for a successful PhD

Welcome and introductions

Outcomes for the workshop

1. Deciding who to supervise; what to supervise; and being supported in your supervisory development

2. Establishing and maintaining good supervisory practices – ground rules, learning contracts and managing expectation
3. Starting to supervise – defining titles, developing proposals, the importance of the conceptual framework
4. Supervising the literature review
5. Choosing research methodologies and methods
6. Supervisory roles, identities and dialogues – empowerment? challenge?

Day 2
Maintaining momentum and successful learning/supervisory practices

1. Dealing with difference; working with different learners and learning styles
2. Developing critical thinking and crossing conceptual thresholds
3. Developing good writing habits
4. Gender and other differences in the supervisory relationship
5. Supervising cross culturally, at a distance, online and offshore
6. Helping students to help themselves and each other
7. Writing transfer and progress documents

Day 3
Completing and achieving the PhD

1. Dealing with difficulties: (1) in the research and development of the dissertation, project or thesis
2. Dealing with difficulties: (2) in the supervisory relationship
3. Maintaining momentum
4. Writing up and submitting
5. Getting ready for the examination and viva
6. Corrections, presentations, publications and jobs

Review and close

For the University of Gothenberg, Sweden, the three-day course is a part of a semester-long compulsory supervisor course with assessment. For the University of the West Indies, it is also mandatory for supervisors, and elsewhere smaller courses are seen as a 'licence' to begin supervision, followed by updates through smaller courses on particular topics.

Models of supervisory development programmes range from emphasising training and instruction to narrative storytelling and sharing (McCormack and Pamphilon, 2004). Some programmes are workshop-orientated, some online, and some are mixed mode (Wisker, Robinson, Trafford, Warnes, Creighton, 2003). Margaret Kiley focuses (2011) on development programmes in the leading Australian universities, noting the different dimensions of supervisor programmes and that 'The most common aspects of the programs included supervisor/student relationships; clarification of various expectations; milestones and monitoring progress; roles and responsibilities of supervisors, candidates and institutions, and policies' (p. 585).

Kiley and others explore the reasons for and effectiveness of research development programmes for postgraduate students and also for supervisors, where, for example, Hammond et al. (2010, p. 31) suggest that 'Research supervisor training is typically funded and supported as part of universities' concerns with timely and cost effective completion of higher research degrees.' They consider two aims of supervisor training programmes, noting that: 'On the one hand, the aim of research supervisor training is to contribute to the overall professionalism of supervision by providing pedagogical support for supervisors, and assisting them to develop greater awareness and skills on their own supervisory practices. On the other hand, research supervisor training provides a way for the university to monitor supervisory practices, to ensure greater compliance with university systems and policies, and to minimise risk.'

Supervisor development is a professional development opportunity, and also fundamentally linked to the enabling of others, the students, to develop their skills and gain qualifications. Beyond that, such development and the updating of supervisory skills enables knowledge construction and a broader professionalisation: compliance and monitoring on the one hand, but enabling and development on the other. Supervisor development programmes need to knit these together.

At the University of Brighton (from 2010 onwards) we have developed an online or face-to-face and online (blended) learning master's level module for doctoral supervision, which encourages internationally and locally based supervisors to work together, over time, engaging with the literature and theory around supervision and reflective practice on their own experience. They can also share critical incidents and examples of successful practice, and map their own development against their own developing practice with one or two doctoral students, or, should they not yet have students of their own, the doctoral students of a colleague (where students and supervisors have agreed). This aligns student developmental journeying with supervisor developmental journeying, and uses this book as a core text (among others) (see below).

Programmes using reflective practice and online case studies exist at both Queensland University of Technology (Aspland et al., 2002) and the University of Sydney, where, in the light of the new research training agenda in Australia, Angela Brew and Tai Peseta (2004) ran a research supervision development programme, the 'Recognition Module', inviting research supervisors to produce an online case study of their own supervisory practice for supervisory development.

The development of an informed case study moves supervisors on from their own established practice, often modelled on how they were supervised, encouraging awareness of this and how they incorporate research information on good practice. Case studies show reflection and development. The tutor team provide feedback and the case goes online as a resource.

Participants are invited to focus on the stages of research development, differences in learning, culture, distance, gender and subject area, and different research paradigms within which students are working, whether they are undertaking research related to professional practice or more thematically based disciplinary or interdisciplinary research.

Case studies are useful ways of engaging colleagues to share their practice in an easily accessible manner. They depict incidents of teaching and learning, raise pedagogical issues and prompt discussion of them (Hutchings, 1991, p. 1).

Reflective practice is enhanced if a case study contains four dimensions:

1 *Authentic* – the issue must be anchored in real-life experience.
2 *Concrete detail* – sufficiently rich in context so readers can make decisions about how to proceed.
3 Cases are most effective when written in *narrative form* – the reader identifies with the issues and characters, and has some emotional investment in how the action unfolds.
4 O*pen-ended* – 'open to various interpretations and not suggestive of a particular or correct course of action'.   (Brew and Peseta, 2004, p. 9)

Brew and Peseta (2004), McCormack and Pamphilon (2002), Aspland et al. (2002) and Delamont et al. (1997) all use case studies. Examples include extracts from narratives, interviews and *short* real-life case studies for consideration. These help to develop and share ideas on good practice in supervision.

Writing case studies as a form of scholarly and professional development within the context we have outlined is our attempt to engage with what Boud, Cohen and Walker (1993, p. 9) call 'moving colleagues beyond their

experience and what they observe around them into new worlds of prac-
tice'. Ottewill et al. (2002) point to seven ways in which case studies can
inform educational development in this way:

1. By arousing curiosity thus preparing the way for experimentation.
2. By disseminating good practice.
3. By moving the emphasis from how to do something to how it has
    been done by others.
4. By stimulating ideas and discussion and reflective practice.
5. By helping to develop learning communities.
6. By providing legitimacy for variety in educational practice.
7. By providing a basis for generalisation on the basis of collective expe-
    rience.
    (Brew and Peseta, 2004, p. 10)

The intention of larger case studies is to encourage reflection, rich practice
descriptions, and to identify recurring themes, motifs and metaphors.

▶ Stories and narrative-based supervisory development

McCormack and Pamphilon (2002, 2004) use narratives in workshops as well
as self-study for supervisors. They comment:

> Bruner (1986) has argued that narrative is one of only two primary knowl-
> edge forms, the other being the paradigmatic form typified by scientific
> logic. To narrate a life experience is to tell a story and to create a story, in
> a way that is coherent to both the narrator and the audience. By appropri-
> ating, interpreting and retelling the past from the perspective of the
> present, the self constructs itself (Kerby, 1991). Further, this personal
> sense making must be acknowledged as a dialectic engaging the person
> within her/his cultural location. As people interact with the popular and
> marginal narratives of their culture, they learn how to regard themselves
> and how to make themselves intelligible to others.   (McCormack and
> Pamphilon, 2004, p. 25)

McCormack and Pamphilon's workshop manual (2002) provides a well-
researched argument for the use of narratives and storytelling for personal
and professional development purposes. In their workshops with postgradu-
ate supervisors, they base group work and individual reflection around
typical scenarios or stories of postgraduate supervision and postgraduate

research, constructed from discussions and interviews with others, individually or in groups. It is important to involve those seeking development in the construction of their own stories, and their own versions of supervisory activities arising from reflection upon examples. Reflection and deliberation enable supervisors to interpret, question, develop and own values and good practice for postgraduate supervision. The articulation of ideas and practice formation arise from storytelling and sharing.

Inviting people to share their stories as a way of understanding experience is a well-established procedure in group work. Naming experience (Linden, 1999) and the extensive analysis of stories over several sessions in collective memory-work are examples of this (Haug, 1987; Lee and Williams, 1999; McCormack, 1998). Storytelling, as McCormack and Pamphilon tell us, is 'a strategy used by therapists' (White, 1997; White and Epston, 1990). It has parallels with the feminist consciousness-raising groups of the 1970s and 1980s.

> Her/his story may be appropriate or problematic, functional or dysfunctional. However, at the centre of most approaches is the belief that the individual must learn how to change her/his story to a better one. By locating the problem within the individual, no account is taken of the discursive locations of that person and the impact of contradictory and competing discourses on the individual. A post-modern understanding of the issue allows a more complex awareness of the individual to emerge. (McCormack and Pamphilon, 2002, p. 26)

Identities are constructed in social contexts and supervisors operate in professional social contexts relating to the demands of the university and the expectations of the student as well as the development of knowledge in the discipline, all of which affect those identities.

Postmodern storytelling is suitable in group work that addresses the needs of a variety of individual supervisors. It does not aim to help find 'the Truth' and any single 'right' way to carry out supervision. Instead, using storytelling as a basis for identifying varieties of the role and good practice enables acknowledgement that supervision takes place in a cultural, historical, economic context related to the subject area and mode of supervisory relationships, and changes over time.

▶ Using stories and narratives built from experience

Stories offer both individual supervisors and those in the development groups possibilities of re-storying their supervisory lives because narratives

and stories 'have the potential to reveal both the individual and the collective nature of experience' (McCormack and Pamphilon, 1998; Richardson, 1990, 1997). 'Stories act as a mirror – we learn about ourselves – but also as a window – a way of looking into the past, present and future experiences of others' (Jalongo, Isenberg and Gerbracht, 1995). Looking for both the individual and the collective aspects in stories encourages readers/writers of their own stories to examine and question their experiences (McCormack and Pamphilon, 2004, pp. 3–4).

Boud, Keogh and Walker (1985) suggest that a three-part process of describing the experience, attending to feelings and interrogating the story enables readers or participants in group processes to turn experience into learning. Questioning and reinterpreting enables consideration of 'new perspectives on an experience' leading to 'changes in behaviour' (p. 34).

I hope you could use a similar structured questioning process to take you through the chapters of this book, and on to suggestions for good practice that have arisen from workshops on good supervisory practice in a variety of contexts. In the process, you might uncover your own assumptions and constructs (myths) about what you do as a supervisor, what you feel is successful, what might work in other contexts, what is less successful, what needs some development, and where you might move to next in your practice. Following a reflective questioning process is helpful (see the box on p. 00).

Levels of reflective questioning

Describe the experience
- What, in your words, is the story being told here?
- What is the point of the story?
- To what extent is this also your story?
- In what ways is it different from your story?

Attend to feelings
- What feelings did the story trigger?
- What do those feelings reveal about your experience of the story-teller?
- What do those feelings reveal about your experience?
- What positive responses are in the story?
- How do you feel about these responses?
- Are some responses not present? Which ones?
- Why might they be absent?
- How do you feel about their absence?

Interrogate the story
- Are there words or concepts that suggest a particular world view?
- Which cultural values are elevated in this story?
- What ways of being have been elevated in this story?
- What might be the history of these ways of thinking?
- What other ways of being and thinking are made invisible by this way of thinking?

(McCormack and Pamphilon, 2004, using Boud et al., 1993, pp. 7–8)

Brew and Peseta (2004) have drawn up a list of criteria for good supervisory practice, developed from online work and accompanying research (see the box on p. 00).

Criteria for good supervisory practice

1 Interest in and enthusiasm for the supervision of postgraduate research students.
2 Appreciation of a range of good practice approaches to supervision and an understanding of what constitutes a productive research learning environment.
3 Establishment, for and with students, of clear goals and expectations in the light of up-to-date knowledge of the University's requirements.
4 Productive and regular meetings held with students, which provide them with sympathetic, responsive and effective academic, professional and personal support and guidance.
5 Careful management of the supervisory process to achieve timely and successful completion of the thesis.
6 Development of a partnership with students that takes account of the need to assist them to develop a range of generic attributes and to introduce them to the research community.
7 Open communications established with students with timely feedback, which is both supportive and challenging, given on progress.
8 Utilisation of a repertoire of supervisory strategies to take account of the differing and diverse needs of individual students, including assisting students from equity groups and those off-campus to achieve success in their study.

> 9   Evidence of systematic evaluation of competency in supervisory skills and of critical reflection and engagement with salient and emergent issues in their own field of research, to improve supervisory practice.
> 10 Use, by the supervisor, of the literature on the scholarship of supervision pedagogy, and of relevant policy issues in research education to enhance the postgraduate research experience of their students.
>
> *Source*: Brew and Peseta (2004)

At Anglia Ruskin University a workshop programme is augmented by online 'blended' support in line with Australian examples. Colleagues can visit the site and/or undertake a newly validated MA module in postgraduate supervision, based on working through the online programme.

Because of the likely academic track record and position of supervisors, as well as their varied but often extensive experience, a developmental forum that enabled reflection, and aided identification and the sharing of good practice, making the implicit explicit, could be most appropriate, beneficial and likely to encourage supervisor 'buy-in', while a more structured and didactic programme might not. There is a precedent in terms of resources and provocative thoughts online in the UK in Pat Cryer's website: www.cryer.freeserve.co.uk/supervisors.htm., a 'one stop' web resource for information and advice on research supervision – a resource rather than a course. In Australia, the FIRST programme online site is maintained by Jo MacKenzie at the University of Technology in Sydney (UTS), pulling together materials specifically rewritten for supervisory development online.

Peter Kandlbinder and Tai Peseta (2000a) launched an online and workshop support model so that:

> supervisors could choose to complete the programme as flexibly as their schedules permitted. Some supervisors completed just the web-based modules, some only attended the workshop programme, while others elected for a combination of both.   (Kandlbinder and Peseta, 2000a, p. 1)

They built a flexible learning programme of three interrelated elements: web-based resources, workshops and supervisor case studies. Self-study enabled supervisors to work through the programme in a variety of ways, or to access just the elements they felt they needed when they wanted to. A key element is an online discussion forum aimed at encouraging reflection.

Similarly, Geof Hill and colleagues at the Queensland University of Technology (QUT) use 'journeying postgraduate supervision', tapping into the narratives of postgraduates and supervisors, developing their practice, identifying with journeys, experiences and the case studies of others and reflecting on implications for their own practice.

In the UK, the Open University (OU) EdD supervisory forum uses First Class to promote online discussion of supervisory issues and practice, part of the OU's support for postgraduates, undergraduates and supervisors ('First Class' is an online messaging and discussion environment which is password-protected). Supervisors have a staff room on a virtual campus with bulletin boards, chat-rooms and a supervisor development forum. I e-moderated a six-week-long discussion in 2002. The OU have the infrastructure to support a complex development; many universities do not.

The idea of an online supervisors' development forum for supervisors came about from my experience of supervising Israeli, Arab, Chinese and African postgraduates at a distance. As a supervisor and 'guardian supervisor' of the Israeli PhD programme, I felt I needed to discover and share examples of good practice between myself and other colleagues in a similar situation. Distance supervision is a rather lonely, sometimes troubling role, although as students begin to develop their clarity of thought and writing skills, it is also a very rewarding cultural experience. I was convinced that supervisors needed some support for their own role development. Since January 2003 I have been interviewing students, postdocs and supervisors about their supervision experiences. They all have stories to tell – mostly very positive – about their relationship with their students and supervisors at a distance. However, it can be difficult to get in touch with supervisor colleagues living far away, but establishing an online supervisory development forum can go some way towards facilitating the sharing of practice and support.

The programme was designed to augment face-to-face provision; specifically to address the needs of distance supervising affected by cultural difference; bring together groups of supervisors spread widely around the country; provide a discussion forum and means of keeping in touch with supervisors; and provide a staff room in which to exchange and develop good practice. This dovetailed with an opportunity to produce an accredited MA Learning and Teaching module for supervisors. Our intentions were to produce an online supervisory development provision that could provide developmental support and the option of an accredited programme for both new and well-established supervisors.

Our development was fed by our different experiences and by ongoing discussions with both students and supervisors on the programme. Some of

these we felt were rather more analytical and specific to the programme itself and others generic to supervision. Supervisor/student interactions, working with international students, learning styles, supervising at a distance (see Chapter 13), have all formed discussion and development topics. Strategies developed to address these include ensuring that distance supervision encourages the appropriate critical, reflective, developmental and research-as-learning practices.

▶ Why an online support and development programme?

At both Anglia Ruskin University and the University of Brighton, we wished to build a community of practice, and an online and face-to-face (blended) mode suited us best.

It is assumed that supervisors would find a variety of online provision differently suited to their needs and interests at different times. To this end, a team of six put together a WebCT, then an online supervisory support and development programme, based at ANET (Anglia Net; Ruskin University) comprising:

- bulletin or notice board containing important dates, times, announce-ments and points of interest;
- resource area to post up links, presentations, essays, useful items;
- discussion forum, which involves supervisors and programme team in developing, leading and nurturing asynchronous discussions set up by different supervisors or team members and e-moderated over time;
- supervisor development programme containing information, ideas, questions, tasks and a 30-credit MA module.

Benefits and potential

This format of online development is appropriate for:

- busy people;
- distance usage;
- sharing practice rather than following on a programme;
- ongoing debate and dialogue;
- exchanging' information and keeping in touch.

Oxford Brookes University has run an online postgraduate supervision course using moodle and based on the first edition of *The Good Supervisor*.

Here, participants engage with readings promoting discussion about the roles of the supervisor, and engage students in problem-solving, developing ground rules and learning contracts or agreements, and dealing with some of the difficulties of communication which can arise, particularly part way into the research and writing. Discussions between supervisors/ participants and the tutor deliberately involve the participants' own experiences of being supervised and of supervising, and invite all participants to work together in a group task, focusing on sharing their responses to the case study on a breakdown in communication. The course also focuses on ways of giving feedback from learning, since research students in interaction with their supervisors, both written and verbal, need not merely to be assessed as to how far they are achieving the required level of work, but to be 'nudged' into working at a level suitable for their award. This nudging can be enabled through clear, well worded, explicit communications.

Research informs the development of courses and online support. The HEA National Teaching Fellowship (HEFCE)-funded Doctoral Learning Journeys project (2007–2010) has built a website with an online postgraduate supervision course supported by the first and second editions of *The Good Supervisor* and research findings arising from the DLJ project.

From the project, students and supervisors talk about the benefit of communities and of engaging in dialogue with each other. Some supervisors mention the value of working in teams, some students the richness of building research communities. Online development programmes contribute to this community-building through the dialogues they enable between supervisors, the sharing of examples of feedback, and of worked-through thoughts on coping with issues and problems which might arise in the supervision process. An online supervisory course and support website can encourage the sharing of experiences and ideas, and the engagement with the rich research literature into supervision of research students, so that supervisors can make informed judgements based on that research, quickly accessed through links on the site.

Developing and sustaining supervisory teams, networks and fora

In the US and the Caribbean the use of supervisory teams or committees is long established, and in Australia and the UK it has become much more common over the past six or so years. One reason for the development of committees or teams is the sharing of the supervisory role, in relation to expertise and elements of the role; another is the ways in which such sharing can help build research teams, and research capacity.

▶ **Teams**

Increasingly, research students are being supported by teams of supervisors, each with specific skill sets and areas of expertise which they can offer to the student experience. There are many reasons why the development of teams or committees can make positive contributions to the student learning experience and the overall research community. The increasing number of post-graduate students is one reason for the development of teams; ensuring a broad mix between and allocation of various roles and skills is another; and research capacity-building through teams and shared expertise, a third. Postgraduates, particularly those from international origins, are a growth area, and they bring with them issues of language and culturally inflected learning and research approaches. Many research students in the humanities and social sciences are likely to undertake interdisciplinary or multidiscipli-nary research and so cross subject boundaries, move into new areas of content knowledge and learn new methods and theories. Mid-career profes-sionals often undertake postgraduate research with an aim to relate to their own professional expertise, make a difference in their workplace, and also to link theory and practice.

It is not feasible to expect a single supervisor to be able to cover all of these needs, but it is possible in a team where different supervisors will bring differ-ent areas of expertise, subject knowledge and different roles. Students need to develop a range of skills, and they need to be aware of themselves as learners in an ongoing fashion beyond the PhD, and as part of a research and learning community. Building on supervisory teams contributes to the development of communities of practice, sustainability, and research capacity-building.

Sharing the work between supervisors helps build academic communi-ties. The different skills brought by different supervisors will help to focus students on the variety of skills needed in undertaking research in teams, and the management of the project through to research outputs.

▶ **Formalising the team: focusing on supervisory teams – why are they developed?**

Supervisory teams are often developed to:

- support a variety of student needs;
- support subject knowledge and/or methodology, deal with students working across discipline boundaries, provide checks and balances to ensure equity and break up the tight dependence on one person;

- enable a sharing of expertise, different perspectives, sharing of the load
  of commenting, mutual debate about issues of writing, analysis, etc.;
- fulfil large funding grant outcomes;
- build team skills;
- enable the development of newer supervisors through the mentoring
  role of working with experienced supervisors.

Research and experience suggest that supervisor teams are developed either
from existing research relationships or because of skills mixes, and that
some can enable the mentoring of new supervisors. One way of getting
involved in supervision is to join a team as a second or third supervisor and
to learn from the practices of the director of studies. Teams work well if the
supervision process and responsibilities can be formalised with different
supervisors, who might include among them recent postdoctorates who are
just beginning to supervise. Identifying a range of responsibilities around the
team helps clarify the process for all concerned, particularly the student, who
might not otherwise be able to work out who to turn to for different elements
of the supervision.

There are several issues to consider in team supervision. Supervisors
have historically worked in isolation, and coming together in a team high-
lights different supervisory styles, so it is wise to ensure you can get along
together and agree different areas of responsibility, or there could be nega-
tive fallout and confusion for the student. Your relationships with a co-super-
visor go beyond this student in the political context, and if there are
difficulties they could be personality clashes or different perceptions of the
role – you might be the problematic one. Differences can be exacerbated by
gender and power issues, where a supervisor might be more senior or have
more experience in supervising. Agreeing on a division of responsibilities
should help clarify the working arrangements.

Research conducted during the delivery of supervisor development work-
shops in Ireland, Sweden and the Caribbean identifies points from colleagues
which can support the setting up and maintenance of supervisory teams.
They suggest:

- Clear definition of roles from the start – for both the individual and the
  team.
- Decide at the outset who has different work and responsibilities.
- Ensure agreement – so that supervisors are not at cross-purposes and
  can provide a supportive environment.
- Ensure strategic planning – project development and revision strategies.
- Recognition of the different kinds of input from different supervisors –

which enables career development for the supervisors, clarity for the
student, and fund sharing.
•   At different stages in the supervisory process it is useful to have more
than one supervisor, at review – or progress points – changes can be
supported by more than one voice.

In personal–professional terms each member needs to have clarity about his
or her role and ways of working with others in a team (even if researchers
might prefer to work alone).

The broader team might need to involve others from outside the univer-
sity if there is some special expertise needed that you cannot provide. This
helps remind us that supervisors are not the only people in a community
supporting postgraduate students. Putting students in touch with university
support services, with peer groups, and international and national contacts
will all help them to access the different expertise they need and build
research links. With this range of input it will be even more important to
ensure that the director of studies has a clear management remit.

There are frequently teams of two, including a main supervisor or director
of studies, and a second supervisor. Often, supervisors have different
specialisms, so that one may be a subject specialist and the other a method-
ological specialist, or they might decide to take different roles – one leading,
the other guiding the writing. There are no rules about division, and in prac-
tice there could be many combinations of responsibility. An alternative is the
supervisory team or committee, an American model, also used in the
Caribbean, and common in the case of large science groups. A committee or
team comprises supervisors with different specialisms and different degrees
of involvement with the project. In a more unusual model at the Royal
College of Surgeons in Ireland, in Dublin, Limerick and Cork, students have
supervisors on their committee in each institution, each taking different roles
in relation to the student's work. Research teams and supervisory teams can
develop communities of practice in context. Communities of practice are
professional groupings built on social practices and socially contextualised
learning: 'A theory of learning that starts with the assumption that engage-
ment in social practice is the fundamental principle by which we learn and
so become who we are' (Lave, 1998).

Over time, this collective learning results in practices that reflect both the
pursuit of our enterprises and the attendant social relations. These practices
are thus the property of a kind of community created over time (Wenger,
1998).

For some students, there is the additional issue of an industry- or work-
based supervisor, should they be conducting their research in a work envi-

ronment. The student then needs to negotiate relationships with the work-based practice context and supervisor, and the probably more theorised context of the university, and this can seem like operating between two competing cultures. Developing and nurturing relationships between the two contexts is essential so that the student is not torn between the two, and can be enabled to make those vital links so that their research is of use to and taken up by the industry or work-based context.

Some of the supervision between industry and the university can be seen as team supervision, as can supervision involving more than one supervisor based in the university alone.

Students report confusion over their experience with team supervision whether a mentoring experience is involved or not. There are repeated instances of the student as 'piggy in the middle' of political wranglings and disputes over behaviour, methodology, knowledge interpretation and creation. There can be a lack of clarity about sharing responsibility, which means that you both do the work. As supervisors, you might disagree without debating first and the student could end up confused or even play one of you off against the other, for example: 'Dr A thinks my work is good enough (Dr B is nasty! And has no sense of judgement)' – (reverse this scenario when necessary).

Building and maintaining supervisory teams can help build communities of practice, and both supervisors and students learn varied skills through being in a team or community. These include communication, negotiation, balance, people skills, dealing with different perspectives and perceptions, sharing responsibility and decision-making.

To make this team arrangement work you will need to agree on areas of responsibility and ways of proceeding. It is useful to decide who sees the written work and comments on it first. If you both see it, you need to ensure that you do not offer contradictory advice. Although disagreement and debate are liberating for the student, conflict is not. You will find it useful to agree ground rules about support and different areas of expertise, routes for looking at and commenting on work, providing a second opinion, engender-ing debate and if necessary bringing in third party arbitration. Decide on whether and when you have individual or team supervision meetings, and how to meet and share ideas in between such meetings for community-building and sorting out difficulties. Being involved in a team helps with mentoring new colleagues. Meanwhile, you as a supervisor also have the benefit of colleagues providing a second opinion, particularly if students are finding it difficult to accept your suggestions and feedback. Meticulous note-taking, action points and agreements help with sharing, explaining and ensuring clear information is given to the student.

When supporting student writing and other tasks you might divide responsibilities and back each other up, so that one of you can carry out a first read and make comments on substance or methodology and methods, then the other makes more general comments, or comments on a different aspect. Perhaps only one of you deals with style – or you both do – but don't get into the impasse of marking each other! The team is not just the supervisors, it also includes the student. One of the main aims is to enable students to develop autonomy in their learning, to own the project and be aware of their own skills needs and developments. You need to work out together how you can develop a productive dialogue which engages the students and so models academic interaction and knowledge debate and production.

When students are undertaking field work it could be that one of the team works in situ, so that one of you supports fieldwork, the other the conceptual work. The involvement of employers in a team is essential where students are undertaking KTP, or 'knowledge transfer partnership', research in industry and organisations, but the power dynamic there might be quite different from that between two academics, and the implications of getting the relationship wrong can be long lasting for the student's job as well as research.

► **Mentoring new supervisors**

This can be part of the development of team supervision, or just a collegial activity in your department or school, which helps those new to the role to appreciate the extent, demands and rewards of the role, through being mentored informally or formally. You might like to think back on your own experiences – have you mentored or been mentored in your capacity as a supervisor or any other capacity? You could consider how joining teams of experienced and newer supervisors can benefit everyone, what can be learned from this unity, and what developmental needs can be addressed through mentoring. One issue noted by supervisors with whom I have discussed mentoring is that of equality. How can you set up a mentoring experience which still recognises both of you as equal supervisors if you are co-supporting a student, but one of you is also mentoring the other supervisor? The division of responsibilities needs to be agreed between you, and the mentoring should be carried out in such a way as not to diminish the authority and expertise of the one being mentored.

We need to consider what to do to ensure risk assessment, damage limitations and a smooth process in team supervision, whether a mentoring relationship is present or not.

Activity

What issues can arise? Please consider:

1 A student presents with a thesis topic, which you would like to supervise, but your colleague is not interested in the topic and suggests that no one has the right research expertise to take it on.
2 Your student has been sending drafts only to the other supervisor and you are worried that you are not being involved/cannot quality assure what is being developed.
3 Your student requires expertise in statistics, which neither of you feel able to provide.
4 Your student comes to you a little embarrassed and says that Dr D does not respond to emails and has not commented on the work to date at all. The student is not sure what to say and wonders whether Dr D should be replaced or nudged, or as second supervisor is just keeping a low profile, and is that acceptable?
5 You are quite content with the progress your student is making and there have only been two joint supervisions to date. Suddenly your student appears, most distressed. The other supervisor has suggested the work is not of the right standard, needs to have a change of focus, and that the writing is very poor. The student thinks this set of comments might be personally orientated.
6 A Chinese student declares that she is really confused about the different styles of her two supervisors. The German supervisor, she says, is very organised and directive, and insists on changing most of the words of her thesis, while the English supervisor is very laid back and suggests she should pursue her own reading and research and all will be fine, and she is unsure who to listen to.

What do you think YOU should do to ensure a good supervisory team experience for yourself, your colleague(s) and your student?

What can the university do?

Supervisory development and the involvement in communities enable the dialoguing between supervisors, supervisors and students, and a research-informed community, which learns from the experience and the research into the field. Development programmes, communities and teams enable a research-informed exchange amongst supervisors, and supervisors and

students, which can help build and sustain research communities locally and internationally.

▶ **Further reading**

Brew, A. and Peseta, T. (2002) *Improving Research Higher Degree Supervision through Recognising and Rewarding Supervision Development* (Sydney, Australia: University of Sydney).

Hammond, J., Ryland, K., Tennant, M. and Boud, D. (2010) 'Building Research Supervision and Training across Australian Universities: Final Report', (Sydney: University of Technology, Sydney).

Kandlbinder, P. and Peseta, T. (2000) Teaching and Learning Forum, http://cea.curtin.edu.au/tlf2000/kandlbinder2.html (accessed 16 December).

Kiley, M. (2011) 'Developments in Research Supervisor Training: Causes and Responses', *Studies in Higher Education*, 36(5) (August 2011), 585–99.

Lee, A., Manathunga, C. and Kandlbinder, P. (2010) 'Shaping a Culture: Oral Histories of Academic Development in Australian Universities', *Higher Education Research and Development*, 29(3) 307–18.

McCormack, C. and Pamphilon, B. (2004) 'More than a Confessional: Post-Modern Groupwork to Support Postgraduate Supervisors' Professional Development', *Innovations in Education and Teaching International*, 41:1 (Birmingham: Routledge, January–February).

Metcalfe, J., Thompson, Q. and Green, H. (2002) 'Improving Standards in Postgraduate Research Degree Programmes' (Bristol: HEFCE).

Wenger, E. (1998) *Communities of Practice: Learning, Meaning, and Identity* (Cambridge: Cambridge University Press), pp. 102, 149.

4 Establishing and maintaining good supervisory practices

The relationship between student and supervisor(s) is a very important one and it is essential that you can get on with each other professionally and personally, without necessarily being the best of friends. You need to respect each other in terms of scholarship, academic credibility and practices. For all students and particularly those working at a distance, the supervisor is the link with the university, and an essential guide, teacher, colleague and mentor in the research process. It is also a political relationship, since you as supervisor have both institutional knowledge and access which can support and inform your work with your student.

This chapter considers:

- *supervisory relationships – management and organisation*
- *potential problems and pitfalls – how to avoid or overcome them*
- *clear communications and ground rules*
- *what research students can and cannot expect of supervisors*
- *stages of supervision*
- *first supervision*
- *learning contracts*
- *thoughts and ideas on supervising*

Research students have embarked on what is perceived as a large-scale project (the PhD, MA, the undergraduate dissertation), but, building on previous experiences of supervision, teaching or work practices, they might have unrealistic beliefs about the amount of contact and the amount and kind of guidance *you* can be expected to provide. This could range from expecting to get on with their research project now with only minimal contact with you as

supervisor, to believing they need to ask your advice about every single thing they do. Cultural, gender and age differences, the level of award sought, as well as differences in everyday practices and learning styles could affect expectations and relationships.

▶ **Experiences and practices, supervising and being supervised**

Reflecting on previous experience of supervision is a good way to start defining good practice, and ways of establishing sound ground rules, building on your own experiences of supervising and being supervised. What were the positive characteristics of your own supervisor? And what would you like to avoid when you supervise?

Activity

Draw up a list of six characteristics you think a good supervisor should possess.

Some suggestions follow – but think what your characteristics would be before you look at what others have suggested.

Colleagues have mentioned:

- Accessibility
- Availability
- Ethical
- Provides a model of the researcher and research process
- Mentors and or coaches
- Respect
- Knowledge of the subject
- Interest in the project
- Able to put student in touch with others – networking
- Good communicator
- Challenging and supportive

These are an interesting mixture of behaviours which span personal/professional relationships, concerns about and support for learning development, and engagement with and knowledge of the local institution and wider discipline and research networks.

▶ **Negotiating procedures and regulations**

When undertaking the supervision of research students, you will need to ensure you are familiar with all the university procedures and regulations involved. These deal with the main decision points in the student's research journey, and their rights, expectations and what is expected of the student. Information on formal procedures cover areas such as acquiring research and postgraduate students and formally agreeing to supervise their research, expectations for staged reviews, for example annual progress reviews, reporting procedures, transfer (if at PhD) and submission, what can be expected of the supervisor and what of the student in this ongoing professional relationship between people, the research and the university. It is a good idea to formulate and agree at the outset realistic expectations for yourself as supervisor and for the student, detailing aspects such as frequency of meetings and how to report on them, involvement in research development programmes, the length and format of progress reports required, dates for submission, length of work, etc. Good ground rules are the foundation for a working relationship which enables learning. You can always revisit and change the ground rules, or remind each other of them if the research relationship has some problems. Working through the following questions will help you to focus on how you intend to practise as a supervisor because these ask you to consider a range of issues, from finding and accepting the students through to managing expectations, setting up workable relationships and helping the students to identify their skills and skill needs, so that the whole supervisor–student research project relationship can be developmental and well structured, leading to positive personal and professional outcomes. Most of what follows relates to the more complex, longer lasting relationships and expectations of the PhD but can be adapted for the shorter master's or undergraduate research dissertation.

- How can and do prospective research students discover you and you work in order to become your student?
- What is (are) your specialism(s) and would you be willing to supervise beyond this range? If so, why? What are the implications of stretching your expertise a little too far, or refusing to take 'your share' of the growing number of students who need supervision?
- Are students genuinely working in an area close to your own? Can you supervise them in relation to methodology and methods rather than subject?
- How can you know if students are suitably qualified? What are the procedures? If they are not adequately qualified, what does the university offer to help bridge any gaps?

- Is their English language of sufficient standard? How do you decide? What are the university regulations for international student language standards, and are there courses or support available for your student?
- o whom do you refer unanswered issues? Do you have a referral sheet with phone numbers and email addresses?
- Do you have time to supervise students? How much time is allocated and how is it accounted for? Are there guidelines about supervising, and the time allotted per student at undergraduate, master's and PhD level?
- Who can be the second supervisor? And how do you decide this? (Usually only PhD and EdD level.) How will you divide the responsibilities? Would one of you be more concerned with the subject and the other with methodology?
- Do you/how can you work effectively in supervisory teams? Will you set up meetings? What could you do to avoid students having to juggle conflicting advice? Or is this actually a useful experience for them?
- When do students have to register and how? Is it before or after they develop a proposal?
- What are the various documents which students need to complete at your university in order to:
  - (a) register?
  - (b) complete a research proposal?
- How much time are you allotted to help students with their development of the research proposal?
- At what point does the proposal go before a Research Degrees Committee (or similar) and what is your role in supporting it at this stage? Who else advises on the proposal before acceptance?
- Can you help with revisions?

These questions are designed to help you consider experiences and raise issues. Several of these issues can lead to further considerations of:

- tensions
- regulations
- expectations
- resolutions

Colleagues and the published literature suggest there are tensions between autonomy and dependence, and fundamental issues about what a doctorate is now. How far is it research training for future academic or research work? How far is the thesis a unique large-scale product as an end in itself? How far is it conceived of as a manageable project at a sufficient level, achievable in the time available?

▶ **Supervisory relationships: expectations**

Aim to establish a clear relationship between student and supervisor, with defined parameters right from the start.

Please consider:

- In the following section, there are twelve situations where students may or may not reasonably expect help from a supervisor.
- What issues are raised in these situations? What should you do to set up good practice from the start? Are students being reasonable in their expectations?

Students' expectations of supervisors

1 Students expect to be supervised – guided to clarify research questions; develop a conceptual framework; address gaps in their knowledge and establish research sufficient for a PhD, master's or undergraduate award; identify boundaries; develop structure and a design for the study; and decide on methodology and methods. They can expect to be told if their work goes off-course, seems misguided or is likely to be too adventurous and large-scale. You cannot give this kind of guidance without seeing and discussing the work in progress, of course, so setting up ground rules, frequency of meetings and agendas helps to focus guidance and production of work.

2 Supervisors should read students' work thoroughly, and in advance. This is aided by agreeing agendas and the timing of dispatch of parts or chapters ready for comment. It is important that students identify areas and issues which in their view need discussing and shaping, and for you to indicate areas to discuss, in advance of each regular supervision meeting.

3 Students expect supervisors to be available when needed. Although you can together plan regular supervisions, students need to know you are approachable in between more formal sessions, if necessary, to ask key questions, through a 'surgery' or other system. However, do be clear about your work demands, informing students of periods when you are not available, or pressurised, and decide whether or not you *do* want to be contacted at home on a Sunday evening in the event of a crisis. For international students in particular, such clarification can help avoid embarrassment, excess intrusion or – the opposite – disappearing, over-polite students.

4 Students expect supervisors to be friendly, open and supportive with academic issues and establish a consultative, supportive relationship.

5   Supervisors need to be constructively critical, giving praise where rele-
    vant and informative, not harsh criticism, so students can develop their
    work further. Without helpful information and feedback, students might
    become discouraged. If they do not fully understand the feedback, they
    could carry out unnecessary, misguided work. This is probably more of
    an issue with students from other cultural backgrounds, or when
    working at a distance. In both cases, very careful wording of construc-
    tive criticism, examples and models can help. Gradually, students
    should need less explicit guidance and criticism as they develop auton-
    omy and their own sound judgement.

6   Students expect their supervisors to have a good knowledge of the
    research area, and/or some expertise in both the supervision process
    and the methodology and methods being used. Where you are not a
    subject expert, provided the student has both formal and informal
    access to others who are, and the division of responsibilities between
    first and second supervisor is clearly made, you can still supervise effec-
    tively.

7   Supervisors need to know how to ask open questions, how to draw out
    ideas and clarify or define problems, and how to elicit information, even
    if students find communication difficult. This can be facilitated by
    working for some time with more than one student present, to aid
    discussion, or by identifying areas to discuss, in writing, in advance.
    Your student will need to interact with other students you supervise,
    those researching similar topics, students supervised by other supervi-
    sors, and the broader, academic community (see Chapter 10), encourag-
    ing sharing and autonomy.

8   Supervisors need to put students in touch with information, reading,
    resources, contacts and Internet sites.

9   Supervisors should encourage students to enter the academic commu-
    nity by helping them attend appropriate conferences and introducing
    them to others in their field. Students should also be encouraged to
    publish appropriately and given support with writing and editing. It is
    important to define the amount of work to be published, since too much
    published from a thesis before submission might endanger the original-
    ity of the thesis itself, and too many publications on tangential topics
    could take a student's mind off the main focus. However, publishing
    does develop credibility in the field, providing students with practice in
    developing elements of their work through to completion, ensuring
    clear arguments and structure, like a mini-thesis. A balance needs to be
    kept between publishing, and saving the work for the thesis or disserta-
    tion.

10   Supervisors are expected to be sufficiently involved in students' success to help them after graduation with publication, jobs or promotion. It is a good idea to encourage students to be realistic, to make and follow up academic contacts, using the supervisor for advice and references.

These situations highlight issues such as how supervisors can enable students to enter research culture and gain from opportunities, with support. Supervisors also need to consider how to tease out complex conceptualising and research questions, encourage good design, plan fieldwork, analyse findings and determine their contribution to knowledge. Supervisors are also involved in editing parts of the written thesis or dissertation. Science students working in research labs, or social science students in project groups, tend to work alongside their supervisor, maybe seeing them daily, but 'quality time' supervisions are also needed for students to focus on their work. For all candidates, close or at a distance, it is important to arrange specific times for supervisions, with agreed agendas, taking into consideration expectations, stages of their work, individual personalities and relationships, and other pressing demands on your time and energy as a supervisor. Distance supervisions (see Chapter 13) require very careful management because it is even easier to lose contact with the development of the research, and to mistake the meaning of exchanges.

Now consider two further aspects of student and supervisor expectations.

11   Students should not expect you to do the research for them. They might find this a ludicrous suggestion but there should be limits to *your* time spent on copying journal articles, looking up references, etc., if *they* are to learn the strategies of research.

12   Supervisors must not steamroller students into something totally irrelevant to their project but topical for the supervisor. With funded research in industry, the sciences or some of the social sciences, there is a greater danger of this happening because the project needs to be finished on time, within budget. While a larger research endeavour is important, a specific, contained, manageable, sufficiently complex research project needs defining for the individual students so that they can progress with their research, own it and develop skills to allow them to be part of the research community. They need to be an identifiable part of a larger project so that they can define their own work within it and gain their master's or PhD, while also contributing to a larger project

Are these reasonable expectations of you as a supervisor? Are any of them a surprise? You might like to consider how you can manage and, where appropriate, fulfil these expectations.

▶ **Planning work and supervisions: the first supervisions**

Activity

Consider:

- What do you really want to achieve in supervising students' research?
- How can you, as supervisor, help students to achieve research goals?
- Are the suggestions of supervisory activity at each stage of the student's work realistic? Manageable? Problematic? How can you organise your work with students to support and enable them at each stage?
- Early agenda-planning
- What outcomes do you seek and which problems do you want to avoid?

Considering some of these issues and practices listed in the above activity should help you to plan and manage your supervisory relationship with your research student. Ultimately, it is up to the students to manage the project and their time and to have a clear idea of their goals and how they are to achieve them. However, it is also a learning experience for even the most confident and well-prepared student throughout the research process and project, so you will need to encourage your students to be realistic about how they plan and work, and show them how to change direction, refocus and tackle problems when things are going wrong or well, ensuring they produce a conceptually complex, well researched, well expressed and argued, well presented research project, which genuinely contributes to research in the field. This can and should be a very satisfying process and experience.

One useful early activity with students is to conduct *a skills audit.* This enables students to see what skills they need to develop further in order to be more successful in their research project. Such skills are both generic and subject-specific at the level of research method and subject area (see Williams, 2003).

First supervision: some activities

- setting the ground rules for supervision and student activity
- developing learning contracts
- undertaking a skills audit, and planning how to address skills needs
- developing a title from a general topic area
- scope of research
- considering stages of the research overall and working with students to begin to plan/see ahead
- developing research questions
- developing the conceptual framework
- starting to put the proposal together

Defining the research area, choosing the title and asking the main research questions are essential points of entrance into the research process.

Title, question and scope of the research project

At these first meetings you need to discuss the overall research project with your student. Ask the student to clarify the research title, research questions and how he or she intends to get started in terms of reading and the research design. Remind the student how important the title and question are, since they will underpin and drive the whole research project, its arguments and conceptual level. You need to clarify and offer support where it is useful – but not force a title or an area on a student just because it is your 'pet' area. Students need to be enthusiastic and involved in a project of their own. If they are going to be working in a research group with you and others, or if they have responded to an advertisement for a research student to complete funded research with a PhD as part of the process, they still need to feel they have negotiated elements of the area on which they will work, and that they can 'own' the process. In the case of groups of lab scientists, project work and contract work, this could lead to some conflicts of interest unless handled sensitively. If a student does not 'own' or share the project, he or she might:

- become disassociated from the research as a whole and concentrate only on localised tasks;
- not work at a sufficiently conceptual level because the student is carrying out tasks and seeing only a fragmented process;
- be unaware of developing research skills that are transferable and are

actually expected learning outcomes at this level, to enable them to
become professional researchers in their future employment (whether as
academics, project researchers, or other professionals carrying out prac-
tice-based research in a variety of job contexts);
• lose motivation and direction.

Are there any tensions here for you in terms of your own subject or
research work? How might they be resolved? Some supervisors have said
there is a tension between the need to get a funded project finished and the
carving out of a sufficiently appropriately designed and achievable research
project for a student. Overcoming such a tension is important for both of
you, so sitting down early on to explore how a manageable research project
articulates with a longer piece of funded research is important.
    Early supervision meetings are for:

• defining the topic area;
• discussing what the student would like to research;
• deciding on a title that gives sufficient scope to ask research questions
  but does not attempt too much;
• considering gaps in their knowledge and in their skills and how their
  work might address these;
• considering boundaries to their research – everything related to the area
  cannot be researched. What will the boundaries be? Why?
• developing a hypothesis or research question;
• setting up a plan of activities and starting to identify resources and infor-
  mation sources;
• planning the time – and the critical path;
• deciding how they will seek any necessary funding and support;
• seeking a support group or suitable person to be a critical friend;
• beginning work on the literature search, the reading, initial plans, writing
  the first drafts of the proposal for university agreement;
• seeing what questions and concerns they have about developing good
  research practices in their discipline context and in relation to their
  research project;
• discussing how they can work to overcome any problems;
• determining what future needs they foresee during the course of the
  research such as access to population, ethics, finding the right data
  analysis software.

Overall as one Australian university defines it:

> The research student should ensure that they are engaged on a promising topic that might fairly be expected to produce sound results and within the agreed time frame. Students should work with their supervisors to develop standards of achievement that will result in a good quality thesis. (*University of Queensland Calendar*, 1984, www.uq.edu.au)

Ask your students if their research really *is* sufficiently promising or rich and likely to produce sound results. Will it be completed within the time allotted?

It is important that supervisors work with students to look closely at the stages of development of the research project proposal. It is also important you both agree that this is a promising, manageable project that *should* achieve a good quality thesis/dissertation. Learning contracts and ground rules can help with this process.

▶ Managing supervisions and setting agendas

Before each supervision, you and your student could usefully prepare an agenda considering:

- What questions you need to look at, arising from the stage in the work, identified by either of you.
- What problems either of you feel might emerge.
- What outcomes the students have in mind, for example, what they would like to achieve from this particular supervision at this point in their research. It might be assurance that their direction is right, and their data is interesting and valid, or a chance to test out a hypothesis, consult on a problem, or check out parts of what they have written to see if they feel that they make sense, are fluent, and are written for the right audience.
- What the next stages are in their research.

Drawing up an agenda beforehand for each face-to-face, online/email exchange, however informal, can help you both focus on important current and longer-term issues. Ask your student to send you work well in advance so you have time both to read and to think about it before a supervision. After reading it, you could email the issues you would like to raise and/or a commentary and feedback on the piece ready for discussion. If there is nothing to read you could send them some questions to consider, ready to discuss.

► **Clear communication and ground rules**

These need to be established at the outset and altered when necessary. Student dissatisfaction with the development of their work (Cryer, 1996; Moses, 1984), and with relations with supervisors, can be avoided if there is clear and open communication on all aspects of the project. Identifying appropriate supportive structures and negotiating effective, regular, not too intrusive, open, enabling communication strategies will allow students to have a good experience of being supervised, even in cases where there might be personality clashes with supervisors.

Learning contracts can help you to negotiate workable expectations and relationships together and act as an objective vehicle to discuss any break-downs. Setting agendas and keeping formal notes also scaffold the supervision process and relationship.

► **Learning contracts**

In order for the expectations of both supervisor and student to be realistic and managed, there needs to be some discussion and agreement. For some, the development of learning contracts provides a formal way to agree on how these expectations can be managed and how you can proceed to work together. Learning contracts have been developed from adult and continuing learning contexts. Please consider whether and how they might work for you. It is important for the sake of clarity and equality that learning contracts or some other formal or informal agreement are drawn up, clearly defining how much time and what kind of support the supervisor(s) can offer, and the expected behaviours of both student and supervisor. Learning contracts (see Anderson et al., 1996; Boud, 1995) can be drawn up making each party's expectations explicit. These can help everyone involved in supervision to manage their work, and to point out problems fairly and *objectively*. Contracts focus on terms of work, communication and responsibility. As you discuss your roles and draw up an informal or more formal contract, it helps make explicit your expectations, frequency and kind of supervision, and what to avoid.

Contracts have stages:

1   Identifying needs and stakeholders
2   Identifying learning outcomes
3   Resources, strategies needed, planning and agreeing rules, work, roles
4   Assessment – how can the agreed work be seen to be accomplished?
5   Review of success (or not) and evaluation.

Learning contracts are a learner-centred way of encouraging learners to identify and be involved in their own programme-planning, recognise their learning outcomes and objectives, and become fully involved in their own learning – developing their learning approaches and styles, making the most of their learning opportunities and monitoring their own learning needs and achievements.

A sample learning contract for research degree supervisions appears in Wisker (2001). A shorter version is shown in the box below, but there are many alternatives. You will need to decide what suits your situation and that of your students and develop your own.

Learning Contract

Research student:
Supervisor:
Title/research topic:
Date of registration:
Approximate proposed date of completion:
Agreed frequency of supervisions:

Research student: I agree to:
Negotiate supervision agendas, send work in advance.
Communicate about questions, blocks, problems (usually in short emails).
Produce work at agreed intervals and work steadily.

Supervisor: I agree to:
Negotiate supervision agendas.
Respond to short questions immediately (email).
Read work sent in, comment, advise, determine agenda, action point.
Adivise on accessing the research community.

Signed ....
Addresses and contact points: ....

A draft learning contract
What might this involve?

Draft Learning Contract

Name: ....
Supervisor: ....

• Goals, aims and outcomes
• Appropriate learning tasks
• Time plan for activities
• Ways of identifying achievement
• Contacting

Agreement between ....
and ....
Date: ....
Addresses and contacts: ....

▶ **Research skills audit**

Is your student ready for independent research? A sample skills audit is given below and could be used with students, perhaps forming the *objective* basis for several supervisions. You might also find it useful to use it as the base for a development programme, and a way of identifying achievements other than the PhD or master's itself.

Students, particularly postgraduates, may already have developed research skills from previous research projects and more generally in life. However, moving into postgraduate or undergraduate research is taking a learning leap – more is expected of students and more complex and diverse research skills will be needed to maintain momentum on a manageable and achievable research project. It is useful to consider what research and related skills they might need to (further) develop in order to improve their chances of success. In consultation with your student, it could be a useful practice early on (probably too daunting at the *first* supervision) to audit the student's skills together. Most of these (below) are generic. You might want to add subject-specific skills, and to delete some as irrelevant. The audit can be carried out by students alone, in discussion with you, or, if there is a research group, with peers. The process aids reflection, helping to develop a learning plan. You will need to find out what you, your student, peers and the university can offer students to bridge gaps in the skills they need, to undertake this research project and to develop as good researchers more

generally. You might direct them to research development programmes, books on specific methodologies or methods, a course at the university or at the Open University, online or locally, or you could work to help them bridge the skills gap yourself. Supervisors who have used the audit have found it a useful objective vehicle for reflection, discussion and planning future work with their student. It is also useful as a developmental vehicle because students can measure distance travelled. Skills developed later in the year, during the thesis/dissertation process or in future years, can be mapped against the audit tool. Finally, it helps to build and articulate an awareness of transferable research skills, useful for employability and self-esteem. Supervisors with whom I have used this skills audit always have other skills they would like their students to develop, and comment that it is useful to negotiate the skills needs and skills levels with students at the start of the supervisory relationship, plan some development activities, whether they can offer these or they can be found elsewhere in the university or outside, and check regularly how the student has progressed with the skills they need. The objective audit can be used to help students monitor their own progress and finally can give them an idea of the range of skills they have developed, which could be useful in further study or employment.

To the student
The box lists some of the research skills you might need. Audit them now. Mark the extent of your current skills and your skills needs.

Then ask yourself, and discuss with your supervisor, how you might address needs that you have in relation to *your* research, noting where and when you can work to develop those skills.

Skills Audit

Topics	Scoring	Notes about kind of version of your skill	Notes about need for a place to find and develop help
1 Turning a research topic into a research question, which addresses a gap in knowledge			1 2 3 4 5

		1	2	3	4	5
2	Project planning	1	2	3	4	5
3	Time management	1	2	3	4	5
4	Knowledge and retrieval	1	2	3	4	5
5	Knowledge management	1	2	3	4	5
6	Bench skills	1	2	3	4	5
7	Fieldwork skills	1	2	3	4	5
8	Analytical skills	1	2	3	4	5
9	Critical skills	1	2	3	4	5
10	Calculation skills	1	2	3	4	5
11	Interpretation skills	1	2	3	4	5
12	Evaluative thinking	1	2	3	4	5
13	Problem-solving in different contexts	1	2	3	4	5
14	Creative thinking	1	2	3	4	5
15	Networking with others to share and develop ideas and work	1	2	3	4	5
16	Reading for different purposes	1	2	3	4	5
17	Reviewing the literature critically and in a dialogue	1	2	3	4	5
18	Managing and interpreting data	1	2	3	4	5
19	Drawing conclusions, both conceptual and factual, and backing up with data	1	2	3	4	5
20	Using appropriate computer packages and programmes e.g. SPSS and NUDIST Nvivo	1	2	3	4	5
21	Writing for different audiences	1	2	3	4	5
22	Writing at different levels, e.g. for theses and articles	1	2	3	4	5
23	Structuring and presenting papers	1	2	3	4	5
24	Managing discussions about your work in context and with a variety of colleagues and experts	1	2	3	4	5
25	Finishing off pieces of work	1	2	3	4	5

[1 = new to develop, 2 = some skills, 3 = quite confident, 4 = confident, 5 = a strength of mine.]

Students might find it useful to complete this skills audit again when they have nearly finished their research project, to measure how far they have developed and to identify skills to transfer into future study and employment.

▶ **What students might expect at different stages: a summary**

At different stages of the supervision process, supervisors support students' work and advise in different ways, while maintaining close contact without over-intruding. You might like to map your own work with your student against the following stages (adapted from Wisker, *The Postgraduate Research Handbook*, 2001, 2007).

(1) The beginning of the supervisory process

Supervisors should be expected to help students to:

- define and clarify a title and research topic
- refine research questions
- refine and define the field, scope and nature of the research, defining gaps in knowledge and boundaries
- develop realistic approaches and outcomes
- develop a conceptual framework
- evaluate and decide on methodologies and methods
- carry out any necessary preliminary and ongoing research skill development, for example, developing further research methods, statistics training
- shape initial plans and design outlines
- develop an acceptable and do-able research proposal of an appropriate standard
- gain some entry into the meta-language of research to understand and use terms such as 'conceptual frameworks', 'boundaries', 'inductive and deductive'
- access subject and methods contacts and reading
- develop good time management
- agree a pattern of supervisions early on
- get in touch with other research students

- identify and contribute to the design of useful learning situations and take advantage of activities and experiences that could help them develop
- start to write early, developing good habits of articulation, refinement, editing

Question

How can you set up an appropriate pattern of effective supervisions? What can you do to help students develop and action their proposal? How can you help them enter the research community?

(2) Ongoing supervision – in the middle stages of the student's work

Supervisors should be expected to:

- stay in touch, but not to over-intrude (unless necessary)
- care about the development of the research and work on this with the student
- encourage supervisory learning conversations, enabling students to conceptualise and deal with difficult underpinning ideas, theories and constructions of knowledge
- establish a role model of modes of research, ethical decision-making, commitment and perseverance, being realistic, etc. (this might involve students shadowing you or others in research practices)
- teach the craft of research, that is, ensure that students are aware of the importance of setting up well-defined ethical experiments, managing data appropriately and fairly, producing sound reports and a well-argued, well-documented, well-evidenced thesis/dissertation (this might involve explaining examples of others' work and identifying learning points)
- read students' work thoroughly and in a reasonable, agreed time-frame
- consider students' questions, prompting questions they should be asking
- help to tease out difficult issues and problems
- give constructive criticism and sensitive, developmental feedback, challenging where necessary

- continue to wean students away from dependency into autonomy, gently and gradually
- encourage students to maintain momentum in their work and to revisit proposals, refocus and recast work where necessary as surprises and problems emerge
- encourage academic role development, that is, taking part in the academic community, maintaining ethical and organised research practices, sharing (without giving away) their work and supporting others
- encourage students to make good use of peer and academic support groups and networks locally, nationally and internationally to try out and discuss their own and others' work, exchange advice and provide more personal support
- encourage students to keep very good notes, maintain learning journals, catalogue and manage data and to keep references carefully
- support students realistically through crises in their work
- encourage students to keep writing as they go along, and to edit and refine their work

Questions
How can you support rather than intrude, help your student deal with frustrating results and conceptual work, and help him or her to get over that threshold or learning leap that makes their work meaningful, coherent and new?

What is your role in helping with written expression in early drafts?

(3) Towards the final stages of the student's research

The supervisor should be expected to:

- encourage students to complete a first draft as soon as they can, and alter it as necessary (but don't leave it too late)
- encourage students to edit, edit, edit until the work is well organised and clearly articulates an argument throughout
- encourage students to disseminate at conferences and through publications as soon as they and their data are ready, helping them with this without taking over or stealing their work
- encourage students to produce a well-presented final thesis/dissertation through exploring models, working together in terms of coherence, expression and presentation

- encourage students to prepare thoroughly and fully for the viva (if there is one at PhD, EdD), believe in themselves and have confidence; practise responses to general, possible and likely questions, and consider potentially problematic questions
- encourage students to move on further as appropriate in the field when they have achieved their postgraduate or undergraduate qualification

Questions

How far are *you* their editor? How do you work with them to ensure they show they really understand, can interpret and argue about the data they present? How do you ensure they write up a sufficiently conceptually complex, accessibly written, lively, owned dissertation or thesis?

The relationship between supervisor(s) and students is a long-term one, designed to help students become sound and successful researchers. Students should neither depend too much on supervisors nor take too much for granted. It is essential to be open and frank about mutual expectations and needs. Ingrid Moses comments:

> Becoming a supervisor is a two-way process. Openness in the initial discussions may prevent years of frustration for you and the student if your personality and learning–teaching styles are mismatched and no common style or ground is found. Openness about your own and the student's competence may prevent the student from withdrawing or failing.   (Moses, 1985, p. 10)

Margaret Kiley has commented to me (personal communication) about the importance of finding ways of defining students to identify their varied roles and, I would think, to enhance their status. She says: 'One of the things I have found very useful is to try using different terms for "students" – especially, say, when introducing them at conferences e.g. this is my PhD student Gina, this is Gina who is doing her PhD with us, etc. ...'

▶ **Negotiating responsibilities**

Building on Brown and Atkins (1988), Ingrid Moses developed an interaction which enabled supervisors and students to consider the responsibility for different elements of the developing research. This was further developed by Dr Linda Conrad, and I have built a model from it.

Activity

Please indicate on the axis who has more responsibility for each of these areas of work

Developing research questions

Supervisor ——————————————————————————————————
—————————————————————————————— Student

Gaining access to resources

Supervisor ——————————————————————————————————
—————————————————————————————— Student

Developing and managing the timeline

Supervisor ——————————————————————————————————
—————————————————————————————— Student

Writing the thesis

Supervisor ——————————————————————————————————
—————————————————————————————— Student

Editing the text for submission

Supervisor ——————————————————————————————————
—————————————————————————————— Student

Finding conferences to attend and present at

Supervisor ——————————————————————————————————
—————————————————————————————— Student

Writing papers for publication

Supervisor ——————————————————————————————————
—————————————————————————————— Student

This is just the start of a list – you will probably find it useful to add items over which you feel there might need to be some discussion about sharing or taking responsibility. The discussions which take place about who takes what responsibility, and how much, can help us as supervisors to manage expectations and make students aware of what support they can reasonably expect.

Underpinning ground rules – a summary from suggestions at workshops with supervisors

How could you ensure these ground rules underpin your own work with students? Are there any others?

- Develop structures and systems which can be moulded to fit individuals
- Keep and share notes
- Agree rules informally – time, meetings, schedules of work responsibilities
- Establish support with peer groups and the rest of the academic community locally, e.g. seminar, meetings
- Establish, maintain and share networks internationally
- Good practice – managing your supervision.

Please look through the comments about stages of your work with research students, from defining time and scope through regularity of supervisions.
- What is good practice? And what works?
- What could go wrong?
- Are any of these problems/problem areas possible in your context?
- How could you avoid or overcome the problems?

Expectations and ground rules

- Look at ideas about (1) agendas, (2) ground rules, (3) expectations.
- How can you set up ground rules? What could cause problems? What else needs to be taken into consideration?

While thinking through these stages, please consider – what do you really want to achieve in supervising students' research?
- How can you as a supervisor help students achieve research goals?

- Managing expectations and ensuring good practice in
  (a) social sciences
  (b)   sciences and
  (c) humanities
  What are the differences? What different kinds of prompts and supports are needed? How might the context differ? The aims and outcomes? Methodologies and methods and research design?
  §How might our supervision differ? And how might the other academic community support differ?

We are going to consider differences in relation to discipline areas and levels. Disciplinary differences have become foremost in supervisors' minds as the literation of supervision develops.
- Please ensure all you say relates to your students' current level.
- Think ahead to the level your future students will be at.
- Consider disciplinary differences.
- Consider differences in terms of age, gender, ethnicity, distance, mode of study, etc.

Levels

- What are the differences in student expectations, supervisory responsibilities, and the scope of the research at undergraduate, master's and PhD levels?
- How would you supervise differently? What differences are there in terms of:
  length and depth
  originality
  elements of autonomy in the research
  amount and kind of supervision

▶ Some differences at different levels

Undergraduates
For undergraduates, the issue of autonomy differs from that of postgraduates. This is probably their first large-scale piece of relatively independent work, but it is completed in under a year and its length is strictly defined (approximately 5,000–8,000 words). The need for a simple, mutually acceptable set of ground rules is paramount, as students can so easily let their other work (and life) take over from the necessary, staged development of a dissertation. They are also more likely to be on-site, but this does not mean

that regular meetings will just happen. Many undergraduates avoid supervisors through guilt because their work is not developing. The power relationship is also different and potentially difficult; the collegial exchange perhaps longer in developing. Supervisors need to draw very clear boundaries and ground rules, specify the frequency of meetings, agenda-setting, timescales, due dates and note-keeping. Unused to developing autonomy, students might become mired in data collection, work excessively off the topic or fail to write and rewrite as they go along. Scaffolding undergraduates' research work with them will help them develop good research and working habits for the future. Such a scaffold should be enabling, managed and linked with previous creative and critical thought, risk-taking and lateral thinking. This is a boundaried exercise, but it is also one that helps grow an enthusiastic, skilled, fledgling researcher.

There are a few differences between the disciplines, though I suggest you look at the literature in your own discipline area for fuller explorations.

Science research

- Science projects, often other defined – students could be fitting into a project, a team or carrying out a piece of research defined by their supervisor
- Time limited, fact- and experiment-oriented – positivist and deductive design
- Keeping notes of all plans, decisions and results
- Repeating experiments to ensure reliability and generalisability
- Often working in a group, and supervised daily
- The written product is logical and classical in shape

Social science
- Likely to be involved in social change, intervention, practice – real world, professional; health, education, business also use these strategies
- Constructivist – constructs understanding and knowledge through interactions and interpretations
- More subjective? Bias?
- Uses inductive and deductive research designs, quantitative and qualitative methods
- Group or individualistic, perhaps, in practice

Humanities and arts

- Some social science methods

- Archives, documentary evidence use, interviews, etc.
- Creative production and interpretation/analysis/discussion
- How to capture the creativity in words?

Colleagues have suggested the following are necessary in all supervision relationships:

- Establishing and encouraging development of research orientations – asking questions through to completing a project and writing it up.
- Development of research skills, strategies, processes, behaviours, mind-sets – problematising and asking questions, project design and planning, carrying it out, analysing data and producing interpretations and findings.
- Writing with an argument and theorising running throughout, using the evidence/data imaginatively, and critically; conceptually underpinned.
- Ensuring the research project is a coherent whole.
- Developing skills of expression of reflection.
- Ethical processes and confidentiality throughout.

Much of the recent work we have carried out (Kiley and Wisker, 2010; Wisker, Robinson and Kiley, 2008) looks not merely at the processes of supervision but at the ways in which we can enable, empower or 'nudge' students to work at a critical, conceptual and creative level, and at ways which enable the achievement of a sufficiently critical, conceptual and creative piece of articulated research. Specifically, we focus on the moments of conceptual threshold crossing, when students start to show they are working more conceptually and critically, owning the project more, being more articulate, with learning leaps. Students tend to start to work at a more conceptual level when they develop their research questions or formulate their hypothesis; develop the conceptual framework to their research; engage with the literature; realise how their own work is in a dialogue with theorists, experts and contemporary researchers; make breakthroughs in their data analysis; understand that their work is contributing to the ways in which the discipline constructs knowledge and makes meaning; and realise the originality and contribution of their work.

Questions to consider

How can we encourage students to move along that continuum from conventional rigour and solutions, to create and work at a conceptual, creative and critical level of problem solving? Have you been aware of any conceptual threshold crossing/transformative moments of your own think-

ing and work, or that of your student, where they/you start to work at a new conceptual, critical, creative level in contributing to meaning? If so, when? What does it look like? How did it happen? Vilkinas' (Vilkinas and Cartan, 2006) competing values system offers a framework within which to consider how supervisors and students might at any time actually be stimulated by and underpinned by different intentions, values and outcomes.

Consideration of the different motivations and outcomes which inform our work can help us to manage expectations as supervisors and students, and to pinpoint where different values and intentions can cause tensions.

An extrinsically motivated supervisor who seeks to finalise a funded project and gain several publications, for example, could be at odds with a student who wants to complete for reasons of self-development.

An internally focused supervisor seeking a quality product, might focus on the minutiae, while a student who is externally focused might want to finish quickly, get published, change and get a job. In development sessions, offering the framework as a way of exploring different focus, intent and tensions, and ways of overcoming them through clarification and emotional management of expectations, has been fruitful. You might like to look at the framework with your student to make more explicit your motivations, intended outcomes, and processes of working together.

▶ Other support systems

The supervisor is not the only supportive person in the student's research life. Increasingly, research development programmes help underpin and augment the supervisor's work because they provide a structured opportunity for students to develop research skills, to consider issues that arise in their ongoing work, and to build a community of practice with other research students, leading to peer support. *Peer support systems* using *co-counselling* have developed alongside or as part of such research development programmes. Programmes and peer systems are particularly useful if a supervisor has a large number of students; if the skills gap the student has to bridge is too great for the support of a single supervisor; if students are studying at a distance and/or part time; and to encourage the development of autonomy, rather than dependence on the supervisor for all aspects of the research development process (see Chapter 13).

Students, when interviewed, talk of finding a critical friend with whom to discuss and share work; some rely on family members. Beyond this there is a penumbra of others who formally or informally support students' work, including language and writing support, editorial support and peers who are

willing to give first comments on the developing work. For those for whom English is not their first language, help with translation of more complex elements and tidying of the language and expression should both help to improve the work, and build a supportive, sharing community.

▶ Potential problem areas

Research (Moses, 1985; Delamont et al., 1997; Metcalfe et al., 2002; Wisker Robinson, Trafford, Creighton and Warnes, 2003; Morris et al., 2010) indicates that there are potential problems between students and supervisors that could hamper the development of a successful research project. The supervision process involves:

- learning;
- personal interaction;
- institutional regulations, context, interface – all of which supervisors need to help to manage smoothly.

Some of our recent research highlights the problems of neglect by supervisors or loss of supervisor (Wisker and Robinson, 2011) but there are many potential problems which can arise before such major breakdowns. Might any of the following problems arise in your own supervision of research and, if so, how might you ensure that you identify, avoid or overcome these problems as experienced by students?

Personality factors
Problematic personality areas include:

- neglect by supervisor;
- lack of contact;
- clash of personalities;
- barriers to communication arising from difference, including age, class, race, gender;
- differences in approach to work.

Neglect can be avoided with regular, scheduled contacts established early on with ground rules, so *both* of you stay in touch. Supervisors need to be able to get on with their student, but it is a professional relationship, so personality clashes should be handled carefully. See Chapters 11 and 12 on working with students from different cultures and backgrounds.

Professional factors

Problems of a professional nature include:

- a misinformed supervisor or a supervisor without sufficient knowledge in the area supervised;
- a supervisor with few genuine research interests, or ones which differ fundamentally from those of the student (both of these can be avoided by making your experience, willingness and personal boundaries clear);
- excessive and/or unrealistic expectations of supervisor guidance and involvement from the student;
- the student ignoring the supervisor's guidance;
- the student having difficulties with the research process – such as finding information and sources, samples, access, and so on.

Organisational factors

Organisational problems include:

- a supervisor having too many students to supervise (Does your university have a limit? Ensuring that *all* your students are not starting or finishing at the same time helps to balance the load);
- a supervisor too busy with administration or other work/life demands;
- departmental facilities and arrangements isolating the student;
- inadequate support services and equipment (Are students' expectations realistic? Can you act as an advocate to improve provision?);
- various hitches in the research process.

(adapted from Moses, 1985)

▶ Autonomy or dictatorship?

One of the main tensions supervisors identify in workshops is knowing when to guide or change work, and when to allow the student to get on with it and own the project. Research students need to develop autonomy. Autonomy, negotiation and the development of shared responsibilities should result from the establishment of sound research practices and good, clear relationships, putting supervisors in the position of facilitator, while students are:

- well informed;
- sure of what to expect in the nature of supervision;
- well aware of rules and formats, dates, and what they can ask of their supervisor;

- aware of where their peer groups can help them to share ideas and develop;
- clear about their research question, theories, methods, rules of the university, and able to ask if unclear;
- sufficiently confident to get on with the research and writing but sufficiently secure about the supervisory relationship to ask the necessary questions and check out interpretations, problems, etc.

Some students set up their own peer groups; other groups can be facilitated by departmental or university-wide processes. Still others can be initially launched and, where appropriate, supported by supervisors themselves. For example, in the UK there are Open University self-help groups who run their own sessions and develop their own agendas but *can* invite tutors/supervisors in to contribute and provide information and advice. At Anglia Ruskin University there is an English PhD and postdoc group who meet regularly, support each other to completion and then co-research and co-write. At the University of Kwazulu Natal and other universities in Durban, South Africa, a PhD women-only group, PaperHeaDs, have worked together for years to the same end. Students from the large Middle Eastern cohort-based PhD on which I worked for many years built groupwork in the development programme and met up regularly to support each other's progress through the research and thesis. Some have established a business together, programmes or publications. As useful additions to formal, time-tabled supervision sessions, peer and group-based sessions and systems can make life easier and more productive, encouraging lower drop-out rates and better quality of work (see Chapter 10).

▶ Getting on well with your student

Research students have commented on problems, for example, with a recalcitrant supervisor who seems never to respond, or an interfering supervisor who can't let them get on with anything and checks their every move. It is hard for them to maintain a steady rate of work in these instances. You need to ensure that you have a clear working relationship with your student, do not let them intrude on your personal life, keep the balance between friendship and professional working relationships, so neither of you relax too much and forget that the supervision of a research project is to be completed in a realistic timeframe at an appropriate level. A friendly and professional relationship should result. However, if you do *not* get along with your student, it is important to remain cordial at least, because social

impasses will affect work adversely. In Chapter 2 we have explored at length the recent research on hidden power relations in student and supervisor interactions and it is useful to think about whether this is operating in your own supervisory relationships, especially if it seems that students are not progressing, are silenced, or have competing values and methodologies. Interpersonal relations need handling with sensitivity as the supervision process moves on. They are likely to be influenced by gender, culture, learning styles, etc. (see Chapters 11, 12 and 14).

Case studies

Please consider the following short scenarios of potential problems with research students and reflect on how you could overcome them.

1   Although you have a mutual interest in the subject being researched, you and your research student do not seem to be getting along well. The student misses meetings and does not provide sound reasons. He tends to ring at awkward moments and make unrealistic demands on your time – requests for books, articles, extra supervision, etc.,. and seems to be totally unable to accept the advice you give on what he or she writes. What should you do?

2   A new student presents with a rather mechanistic research question which she is convinced can be answered swiftly through research. The student is not keen to get involved with research methods development programmes and views the audit with scepticism. The student argues that she knows exactly what methods to use, has the skills, and will get the work done rapidly and successfully. What issues should be taken into consideration here? And what should you do?

3   You have been invited to a fellowship in the USA for six months, but have a number of research students working closely with you, one of whom is about to complete, another in the early stages of the work. What should you do? What could you offer to put in place to support them?

4   Your research student seems to be avoiding you, crossing the car park at a distance, not answering emails – and you suspect that

something has gone badly wrong in the research but he does not seem to want to meet to discuss this, and gave a rather feeble excuse for missing the last supervision. What should you do?

5   An international PhD student has very noble, grand, change aims for her proposed thesis but, in your view, the research methods are accumulation-based, entirely quantitative, and there seems to be some dissonance between the methods and the outcomes. However, blank looks appear when you try to discuss this and you are told that the methods were fine at home for the MA/MSc, so they should be fine here now. What do you do?

▶ Managing supervisions – keeping notes of meetings

Many universities now expect supervisors to keep a journal, log or reports of their meetings with students. This aids the management of the research supervision process, allowing both looking back to consider previous advice and discussions should problems arise, and planning ahead to keep track of the ways the research is progressing.

Some universities (such as the London School of Hygiene and Tropical Medicine, and the University of Warwick) have pro formas for research supervision notes. A sample is given in the box below.

The following two extracts offer examples of the sort of notes the supervisor and student would make:

Supervisor   Refine the research proposal – ensure Jon has a clear question and has identified the theories and theorists that will underpin his work. Suggest journals and books – 'Over here', and *City of Words* (Tanner). Also suggest contacting iafa@ct.edu.au for discussions to build up early literature search; sign and agree learning contract to enable us to proceed with supervisions.

Student   Refine research proposal.
Gain access to Cambridge University library for more sources to underpin literature search/theoretical perspectives part of the research proposal. Is there an email group to discuss my interests with? Determine frequency of meetings and mutual expectations.

Supervision log

Date, time and length of supervision with ....
Agenda and agreed discussion areas ....
Work agreed for supervision ....
Questions ....
Issues discussed ....
Progress made

•

•

•

•

Conclusions and agreed work towards next supervision ....
Student ....
Supervisor ....

Supervisor and student

• Defined appropriate research question from topic area
• Discussed and agreed learning contract (*attached*)
• Refined proposal – addressed question of appropriate theories and theorists, interpretation of appropriate methodology and method
• Jon agrees to read texts suggested and bring notes about the texts in a dialogue with each other and own ideas to next supervision
• I agreed to ensure Jon has access to Cambridge University library – provided an introductory letter
• I agreed to find out details of the conference on the American Gothic – send to Jon via email

Next meeting:
Finish off working on the proposal (November 6 for research degrees committee)
Jon will enrol on first research methods programme session

Signed: .... (*Supervisor*)

.... (*Student*)

Activity

Please consider:

- Could you use such agendas and notes?
- How, when and where?
- Are you already keeping such agendas and notes?
- How have they been useful?
- How might you adapt this system for yourself?
- What are the benefits? What might note-keeping avoid and enable?

► **Further reading**

Brown, G. and Atkins, M. (1988) *Effective Teaching in Higher Education* (London: Methuen), pp. 146–7.

Metcalfe, J., Thompson, Q. and Green, H. (2002) 'Improving Standards in Postgraduate Research Degree Programmes' (Bristol: HEFCE).

Moses, I. (1985) 'Supervising Postgraduates', HERDSA Green Guide, no. 3 (Kensington: Higher Education Research and Development Society of Australasia); revised 2002.

Williams, S. (2003) 'Postgraduate Training in Research Methods: Current Practice and Future Needs in English', English Subject Centre Report, no. 3 (Lancaster: Lancaster University).

Wisker, G. (2007) *The Postgraduate Research Handbook: Succeed with your MA, MPhil, EdD and PhD* (Basingstoke: Palgrave Macmillan).

Wisker, G., Robinson, G., Trafford, V., Creighton, K. and Warnes, M. (2003) 'Recognising and Overcoming Dissonance in Postgraduate Student Research', *Studies in Higher Education*, 28(1), 91–105.

Part 2
Establishing Research Processes and Practices
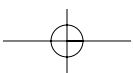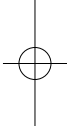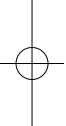
5 Defining titles, research questions, conceptual frameworks, and developing proposals

This chapter looks at the first stages of our work with students, supporting them to turn research ideas and interests into research questions and proposals, underpinned by sound conceptual frameworks.

This chapter considers:

- *turning a fascination or a professional directive into a research area*
- *turning a research area into a question*
- *gaps and boundaries*
- *defining possible research approaches*
- *moving from topic to title*
- *starting to define the research design*
- *developing conceptual frameworks*
- *writing the proposal*

Students choose to undertake dissertations or theses for many different reasons. The dissertation is a compulsory part of most honours degrees and master's, and the research learning skills learned at undergraduate level can be built on for further postgraduate work, although some of the approaches and the dependency more common in an undergraduate honours dissertation will need to be unlearned as students progress to postgraduate work. Alerting them to the transitions between the scope and conceptual depth, as well as the increasing independence and autonomy expected at the next level of qualification might prevent some of the more common problems emerging for postgraduates. *What* the student decides to research and *why*

can be governed by a host of reasons, including work demands, personal choice, what is available, and what has been successful to date. Students might consider a topic that a manager or a scientific team leader feels will fit in with developments and needs at work, or with the overall research project being undertaken by the team, or they might choose an area which personally fascinates them. Different contexts and drives to undertake the research project affect the research question asked. For students undertaking research related to their profession, a focus that could result in the development and evaluation of a change, with recommendations, might be expected. This could be more suited to a report based on a project and might actually *not* have the theorising and problematising necessary for a thesis or dissertation. Students undertaking research related to a science group project might find their focus limited to a straightforward and specific experiment. Some students choose research topics that will enable them to pursue cultural, intellectual, emotional and personal fascinations. Some seek social justice outcomes and perhaps believe their research will change practice in itself, whereas in reality this could be too grand a scope for a dissertation or thesis and the outcomes of the research might inform those making decisions rather than make the change themselves. Some choose research projects they know they can manage, some to deliberately stretch themselves into developing new skills, new topics, new areas and perhaps into creativity. Carrying out a research project should help build skills transferable to future projects, and, so, research capacity building. To the student transitioning into the next stage of study, into the dissertation or the thesis, it can seem a long hard climb up a very high mountain, but in fact, to a great extent, it is learning the skills of research, journeyman work, and I think it helps to share that sense of the manageable, the do-able, with students. Kiley and Mullins advise on students choosing manageable projects (2002) and I have talked and written about the 'Good enough PhD' (2010). This is not an attempt at 'dumbing down' the complexity and scope of the research, just getting the project into perspective with your students. But however manageable a dissertation or thesis must be, it must also be at a conceptual, critical and creative level sufficient to achieve the outcomes and contribute to knowledge. Much of this depends in the first instance on developing a realistic manageable research question and a do-able research design which actions that question, operationalises the concepts underlying and informing it, is well planned, well timed, well scoped and then well written.

▶ Developing research questions for proposals and the research

Early supervision sessions with students involve activities of definition and clarification, the identification of appropriate, focused research questions to drive and underpin the research throughout, and the development of conceptual frameworks for the research. Research grows out of how you see the world, believe knowledge is revealed or constructed, and how you can structure your approach to making sense of that knowledge. As we develop our research, this involves research paradigms, theory and constructing a conceptual framework.

The next stage is the development of a research proposal so that the research itself can be launched. For the PhD, and increasingly for a master's dissertation, the research proposal development stage is quite a lengthy one, with students repeatedly refining a proposal with the aid of supervisors and, where possible, peer groups. They work on the proposal until it becomes workable, manageable, not too grand, well-designed in terms of how it can be actioned, and genuinely practicable. In short, if it were a piece of sewing, they would have the exact dress pattern to work from – and any deviations would be the result of deliberate changes, happy accidents or creativity. This is where the 'conceptual framework' becomes so important, because this *framework of concepts, ideas and theories* underpins and scaffolds the way the question is asked, the research actioned and results interpreted. The research is a contribution to knowledge, producing information, leading to factual conclusions and also a contribution to understanding, deepening the understanding of concepts, as well as key issues in the field, and producing conceptual conclusions. A lead question in vivas for a PhD (however phrased) tends to be 'What is your conceptual framework?' Because this is the language of doctorateness and can be rather off-putting, it is a good idea to start using it and explaining it early in the research journey so that the student goes beyond being busy in the research and operates at a conceptual level – problematising, theorising and creating new meanings. For undergraduates, we might not need to use this term but will certainly need to ask the same kind of question of the student and his or her research.

The supervisor's role is asking questions to prompt thought and clear expression, providing suggestions and models, and helping, enabling and empowering students to:

- **Problematise** – question and unpick what is given or taken for granted as 'natural'.
- **Conceptualise** – move beyond the descriptive to identifying concepts or ideas that underlie the representation of experience.

These two approaches unpick the obvious and open up the terms taken for granted, which can then be explored and questioned, through the research. For example, one student might be interested in exploring the reasons for, actions of and ways of managing youth behaviour. They could develop ideas and expression from, for example, seeing and being interested in a group of boys hanging about kicking things, slightly threatening, bored, to identifying a concept which starts to define the boys and their behaviour, e.g. 'disaffected youth'. Once the concept is defined, i.e. disaffected youth, it can be broken down and problematised or questioned further so that elements are identified to be explored and questioned. This produces recognition of, in this case, disaffection, poor social behaviour, so that you can ask, Why? What? How? What could this lead to? What could be done? The concept is put into action, or operationalised, so that those elements of it can be explored, questioned, tested and theorised. The student will need to read through the literature on adolescence and young adulthood, criminal behaviours and social disaffection, and explore theories lying behind the literature and the concepts – anomie (to explain the social disaffection), identity development theories, and so on. These theories, contributing to the conceptual framework, will underlie their research question, methodology and methods, data analysis and interpretation.

Through the research design in action, research evidence can be produced which can be analysed and interpreted.

In another example, a student might be encouraged to develop a research question from an issue that they experience at work, or which interests them. In one example, the student might notice colleges on the outskirts of towns with students from rural areas who have both less money and a lower educational background than those in the inner-city colleges, but who succeed in study through the way the college works with them. This observation can lead to identifying the question: 'How and in what ways are "access" or widening participation initiatives supportive of educational provision and empowerment?' The next step is to read the literature to clarify the question further and see what theories can help explore and theorise the question, and the appropriate research design (there could be several, so the student needs to defend the one chosen). The student also needs to consider which methodology and methods to use to put the question into operation and ask and address (if not fully answer) it. Again, the student needs to defend the appropriateness of the choices and underpin these with the literature. Then the student can get on with the research. Some students come with an answer to their research question, which they want to prove. This could be fine or it could be an issue, as it will lead most likely to a quite mechanistic and rather simplistic piece of research. Proving what they

already know might lead a student to be limited in their reading, experimentation and exploration and unaware of how to deal with setbacks and failed experiments. Starting with an interest, an open mind, a hunch or an assumption rather than a rigid insistence is probably a safer way, then the actual research with all its risks and surprises can lead them to explore, question, discover and maybe even find something quite different from what they originally expected. It is research, after all, not a formulaic task.

- **Plan** – organise ways of asking research questions or testing hypotheses that are realistic, achievable and timed.
- **Action** – translate a plan into a series of actions, processes and linked activities.
- **Manage** – pull together data, activities and ideas.
- **Analyse** – ask questions of data, theories and theorists, drawing them together into categories and themes that emerge or have been identified, helping the student to make sense of and sum up the meaning and contribution of what the student has found.
- **Reflect and evaluate** – What happened? What did you find? What does this mean? Does this make any significant contribution, challenges or change?
- **Make it all coherent** – find the right format, language, shape, expression, connections between arguments, sense of the impact, and meaning of it all – so it is coherent:
  1   at the level of argument;
  2   at the level of expression and presentation;
  3   conceptually – the piece of research finally expands and clarifies ideas or concepts *because* the questions were asked using those concepts, theories and methods, and the student analysed and reflected on these.

First let us consider the demands of a research proposal in order to contextualise the research question. Most universities expect students to construct a research proposal for a dissertation or thesis, since the design of a workable proposal suggests students are engaged, organised and sufficiently articulate to undertake research. While a good proposal is no guarantee of good research, as so much could go wrong or deviate from a proposal and plan, it does lay down a useful map of the research. Its construction makes students match conceptualisations, theory and passion to what is achievable, and how to put it into practice. A common format for a research proposal at PhD level is a very good blueprint for constructing one at MA, MSc or undergraduate levels.

Format for a research proposal

Shape of proposal	**Prompt questions**

Indicative title (should be a statement rather than a question)

Aim and focus

• Research question or hypothesis – problematising the statement, identifying underlying concepts so that the area under study can be interrogated, not just described. There can be sub-questions in a hierarchy helping ask the question. Science research usually has a hypothesis, basically an assumption to be challenged and explored.	• What is your research question? • Are there any sub-questions? • What is your hypothesis?

Context

• Establishes students' own context, that of the research, topicality, timing, key issues, the gap in knowledge this work will fit. • What are the concepts (ideas) that the research will deal with?	• What is *your* context in relation to your research? • What is the brief history of the field? • Why undertake this study now? • What is *unusual* about it? Now? What concepts or ideas underlie it?

Theoretical perspectives

• Theories and interpretations, arguments in the field into and theorists which the work fits. Includes the key theories and theorists in a dialogue with the student's own ideas and plans.	• Which theoretical areas, theories underpin your research; help you ask your question? • Who are the key figures and theorists? What are the debates? How does *your* work engage with the debates?

Shape of proposal	**Prompt questions**

Methodology and methods

• Choices of research approach based on beliefs about how the question can be asked – theory-building (inductive) or theory-testing (deductive).	• Is your work inductive or deductive/theory-building or theory-testing or both, and, if so, *why*?, Where? Does it make an intervention or not?
• Interventionist (causing) change or non-interventionist.	• Which methods could you use to ask your question/ vehicle your enquiry? Why? Why not others?
• The active vehicle or vehicles that enable the student to question the area or field to ask, observe, explore, experiment and take part using interviews, focus groups, experiments, tracked processes, observation schedules and questionnaires, etc.	• What are the limits of each and method?

Design of the study

• How you are going to undertake the research?	• What will you do and in what order?
• Why, in what roles, using which sample or experiment?	• What's your field, sample, population and why? Do you have access to them? How?
• Where, when, how many and why? Boundaries – what's *not* studied and why. This helps plan ahead.	• What will you *not* be looking at in your work, and why?

Ethics

• Considerations about risk, harm, confidentiality, invasiveness, participant consent, full information, withdrawal and the use to which research is put.	• How will you gain informed consent from human participants?
	• Can you ensure they will come to no harm?
	• Can you ensure there's no risk to you? Or your participants? Or from your research?
	• Can you ensure the information will be kept confidential and not used for other means?

Shape of proposal	Prompt questions
Outline plan	
• Essentially, a plan of what each chapter could focus on – suggests themes, developments and differentiation.	• What do you think the shape of your dissertation or thesis will look like? Which chapters and why?
	• Do you intend to separate results from discussion (scientific) or have several chapters which interweave the data and the discussion i.e. move between extracts of results and discussion along the links of themes and developing argument?
	• How will this dissertation/ thesis shape help you to develop an *argument*?
Justification for the level of the award	
• Some of this will have appeared in the aim and focus, but here students make statements about contribution to knowledge and understanding, why it is important and meaningful and how it could lead to further work and insights.	• How and why is this making a contribution to knowledge?
	• Why is it important?
	• Why bother doing it?
	• Who could use it or do further work with it?

Research questions

How do you work to help students turn an area of interest, a problem, a desired development or an area of inquiry into a research question?

Students' research focus and question

Students need to be really *interested* in what they will be researching. Probably because it is their first piece of research, even an undergraduate dissertation seems to be a very long project and interest is needed to maintain focus and motivation. Whether it is a new or a longstanding interest, it

needs to be shaped and focused into a research question. Both enthusiasm and organisation will help students to sustain their interest, maintaining momentum even in the darker days of too much or too little data, and of writing up.

Students need to determine what form their research will take: experimental, exploratory, explanatory, action research, evidence-based, etc. It is perfectly acceptable to carry out a *theoretical* research project rather than one dealing with the real world and empirical data.

A dissertation/thesis expanding and arguing about the different ideological constructions underlying our perceptions of, for instance, something as serious as 'homelessness' could be explored from several different angles and different theoretical perspectives. For example, it is a social construct; due to psychological defects; a selfish choice; sustained by weak social policies; a symptom of an uncaring society; or due to anomie or mental illness. Students can choose questions as theoretical and philosophical as contested views about the existence of God. Each of their questions can be approached using different theoretical perspectives and so utilise different methodologies and methods. They need to understand why they are using the theories they use, and approaching the research in the way they do, as examiners will want this to be clear and well defended.

Any topic can be approached in a variety of ways, and so can lead to particular kinds of research. Sometimes getting students to share their fields of enquiry and questions with each other early on helps them identify whether their research is theoretical or experimental (trying, setting out and measuring results), or based on their own experience, etc. If they approach their field, area or question from as many of these paradigms as possible, they will see how they might theorise differently, open up their area of questioning, and use a variety of methodologies and methods to ask their question. It helps them to expand the boundaries of their work before choosing the exact area they want to research and to be able to defend exactly why they have chosen a theoretical study using documentary research, or an empirical study using interviews and questions.

Students often present with the broad statement 'I want to look at ...' and we need to explore what the issues are, the concepts and the underlying questions (so the research does not remain at the descriptive level).

Activity

How might you help a student clarify the question, identify and prob-
lematise the concepts, develop a research design and choose appropriate
methodology and methods. To deal with the following, you could ask
your students to help you with the issues raised by the work of other
students so you would ask: 'Help me with these students – Where are
they on the continuum of kinds of questions and research approaches?
How should they go about their research?'

- I want to look at airline terrorism
- I'm interested in literary vampires
- I want to look at how first world countries help third world countries
- I'm looking at the relationship between fruit flies and Alzheimer's

---

A student's research question, context and sought outcomes dictate appro-
priate methodology/ies to underpin their work, and appropriate methods to
ask questions:

- Qualitative, quantitative or both
- Experimental, ethnographical, etc.
- Action research
- Phenomenographical research

And so on

At this point it is probably worth considering some of the findings from
our National Teaching Fellowship-funded Doctoral Learning Journeys
research (2007–2010) and the 'parallel' project (2003–2011), which indicate
that there are some significant moments in the development of a research
proposal and design, where students move from being descriptive and fact-
and information-based and start to ask conceptual, theorised questions.
Some key moments which prompt the conceptual threshold crossing, the
learning leaps, are:

- Identifying a research question.
- Engaging with the literature and theorising – interaction in a dialogue
  between and with (1) the theories, (2) the literature and debates in the
  field, and (3) their own work in the literature review/theoretical perspec-
  tives chapter.

- Methodology and methods – engagement at a conceptual level with why they conduct the research in the way they do.
- Research design which actions the question.
- Data analysis which carries out a theorised exploration and investigation as well as a well organised systematic piece of work.
- Conceptual conclusions.
- Viva preparation and the actual viva, where talking about and discussing the work and defending it with experts pushes to new levels and a new sense of coherence.
- Throughout their research, writing and presenting, enabling, encouraging and empowering students to work conceptually – being critical, evaluative, problematising, creating – not just being busy … so the thinking, planning, research work and articulation are using the meta-language of postgraduate-level expression and the student is working at a conceptualised level.

With my own undergraduate dissertation students there are some useful prompting questions which move them, for instance, from questions such as 'What?' to 'How, in what ways?' In a literature course, 'What' questions could be: 'What do Cormac McCarthy and Margaret Atwood say about the potential end of the world in their fictions?', while problematising questions which explore issues, theorise and use form could be: 'How do Cormac McCarthy and Margaret Atwood engage with issues, problems and potential individual and cultural responses in their end-of-the-world fictions?' The 'how' part of the question starts to engage with theory and form. Similarly, with a question from education or social science there is a great deal of difference in terms of the interrogation, conceptualising and theorising possible. 'What cultural factors affect the learning of Saudi students in a UK system?' is a 'What' question, which could produce a list as an answer. However, 'How does culture engage with learning in the work of students from Saudi Arabia studying in the UK on master's courses in the social sciences?' is more conceptualised and theorised, since it will require some theorising of culture and culturally different learning styles and approaches. It problematises issues and is more specific because it starts to move away from the generalised and vague to the manageably local and specific, where a particular group of students in a context can be explored in terms of their culturally affected learning. Then this study, though not generalisable, could be used to inform understanding and further similar studies. One of my practices with students is to ask them to develop a third class and a first class question, where the third class, 'What', descriptive and/or confused question would almost inevitably produce work which will stretch them less and lead to less conceptualisation and engagement than the first class question.

▶ **Boundaries and gaps**

Gaps and boundaries in a field of study
Students need to define how their work is distinct from other work, how it finds and addresses a gap in knowledge, and how it is situated in a larger field.

Visualising this often helps students to see the size of a do-able project. In looking at this, I define the whole area or field of study, and all the angles the student might explore in investigating it, as the 'whole cake', while the student's own piece of research appears as a part of that, the defined 'slice of cake'. In this analogy it is possible to see what the research questions and project can do in relation to a much larger set of questions, a larger field, of which the student must have some awareness, and must be relatively familiar with the literature. The student has clearly made a choice in picking the slice and is aware there are other angles, approaches and research designs which would answer differently framed questions. Indeed, different questions would lead to exploration of different slices of the field. The student knows how to defend the choices and recog-nise the boundaries – the outside of the slice – the area the student is not looking at now (though might later), or the ways the student is not approaching the research now (though someone else might, at another time), and also areas still to be investigated, perhaps at a later date beyond the qualification.

The diagram in Figure 5.1 opens up thinking for those who are visual learners, or whose culturally inflected learning experiences lead them to prefer to visualise and align themselves with analogies. Actually, it seems to help all learners identify a manageable or do-able project out of a vast field, then to identify why they are carrying this out in this way, answering this question, and what else could be done – later on or by others. It frees up thinking and helps planning.

Later, the same diagram can be used to help students find their way through the mass of data accumulated, and remember what their question is, realise it might have shifted, and that the slice of cake will then also shift. Finally, it can be used to help students indicate what they have found and achieved, how this fits into the whole area or field, and so defend their work in their conclusions, abstract and viva, should they have one.

Gaps and mind maps
Students can be helped to define the gap in existing knowledge that their work fills by completing a mind map identifying: (i) the whole possible field of study; (ii) the area on which their work will focus.
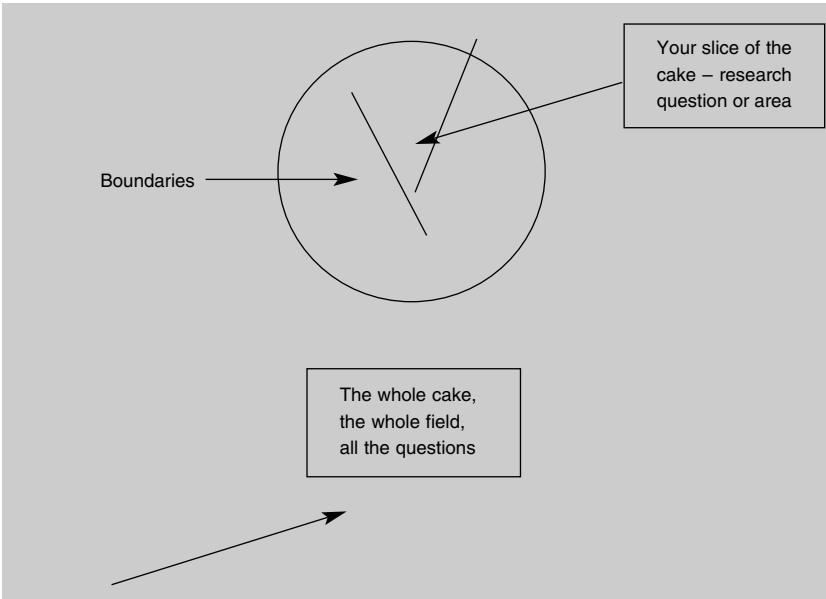
FIGURE 5.1   RESEARCH AREA AND BOUNDARIES
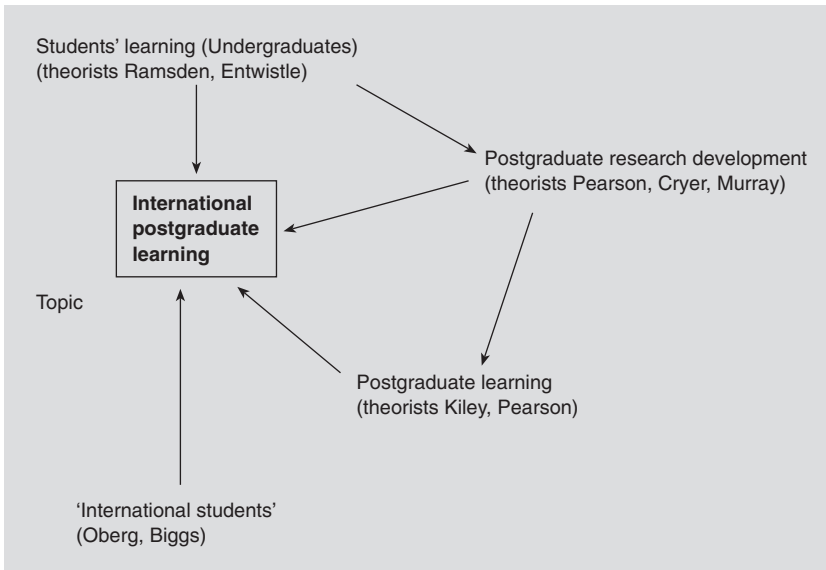
FIGURE 5.2   MIND MAP FOR 'INTERNATIONAL POSTGRADUATE STUDENT LEARNING'

On the subject of 'international postgraduate student learning', such a map could look like the illustration in Figure 5.2.

My student wants to explore 'international postgraduate student learning', and then some of the strategies for supporting this learning. He or she finds research in:

- undergraduate learning
- postgraduate learning
- international students
- postgraduate research development programmes

The student then *uses* these areas and the theorists to focus on the gap in knowledge in this work.

From topic to title

- Keep it tight and properly boundaried – your 'slice of the cake' – others can ask other questions and explore other areas and issues
- Do not set up a purely descriptive dissertation/thesis
- Set yourself a problem or a set of critical questions and/or a set of contrasts – contrasting arguments about or approaches to. ...
- You are contributing to ongoing debates and entering a dialogue in the academic community

---

Boundaries

Whatever a student's research area, there are other questions he or she could ask, other data, other experiments and other approaches. If students don't define their boundaries, they will lack focus and, possibly, as they pull together a vast amount of data they will find they cannot say anything coherent. So, the research question is important because it will start to help define *exactly* what the research hopes to ask and answer – the gap in knowledge – and also the limitations or boundaries to the area in which they will work. Candidates can explore other questions and areas of information later, taking their work further after completing their BA, MA or PhD. An analogy can be drawn with a slice of cake (Figure 5.1).

> ### Activity
>
> Consider:
>
> • Could you use these questions and analogies about areas of work with your student?
> • What example of research areas and questions might you work on with them?
> • What sorts of issues about approach and interpretation arise, depending on the kind of research question and paradigm, research methods and methodologies chosen to explore it?

▶ Conceptual frameworks

- How do you work with students to clarify what is meant by a conceptual framework, or underpinning concepts and theories that will help to scaffold, underpin and structure their work?
- Consider strategies you have used, conceptual frameworks that have been formed from specific questions, and cases of students who find this difficult.
- What would you define as good practice?

Anecdote

One of my own research areas is women's vampire writing. The Gothic in literature is a very popular area in the late twentieth and early twenty-first centuries. There are several students who want to write undergraduate dissertations in the field of the Gothic and of horror, with vampires being favourite examples. One day, after the undergraduate dissertation titles have been agreed, one of my second year students comes into my office, about to start her research, with what I would hope to call the conceptual framework to begin to guide her reading over the summer. She is dressed in black. Her dissertation is on nineteenth- and twentieth-century writing about vampires. 'Why do you want to research vampires in writing?' I ask. Her reply is interesting: 'I really love vampires! My boyfriend thinks I might be a vampire.' Aha – enthusiasm! Always a good start. 'What do you feel the vampire is being used for? What does it represent? How is it being used as a

> metaphor or an argument?' I ask. Blank. Oh dear. No, she is not
> working at a conceptual level but at a level of enthusiasm. What has
> she read? Is she familiar with any of the theorists who clearly explore
> how the figure of the vampire has been used in different ages and
> places to carry certain arguments about outsiders, contagion, gender
> and power? No – the idea of theorising something so entertaining is far
> from her thoughts. We had several meetings, of course, as the disserta-
> tion developed, but I never managed to ignite that small, conceptual
> spark, and the dissertation (which failed) never really engaged with
> any theory or argument, it merely detailed examples of vampires in
> literature. What had happened was that her enthusiasm had not been
> coupled with intellectual enquiry, with the kind of theorising and
> analytical approach that problematises what we see before us and asks
> Why? Why not? How could it have happened? What if it had not? How
> could it have been? How could it be otherwise? What's the point in all
> this? Why does it matter? And so on.

Conceptual frameworks are essential for students to establish a theoreti-
cal underpinning to their work at whatever level, be it a first-year undergrad-
uate essay or a research thesis for a PhD – although, of course, they are
operating at very different levels. Recording and detailing are only *part of* the
research process and are really only useful in the service of argument, inves-
tigation, problematising and speculation, all of which are driven, informed
and underpinned by theories and ideas, or, more complexly, concepts.

The conceptual level is crucial for research projects. The conceptual
framework that will run throughout the student's work and throughout the
thesis or dissertation is the scaffolding of the work, the informing backbone.
Work which is under-theorised tends to be reducible to a collection of facts
and data, and the description of the predictable, unproblematised, unques-
tioned and merely stated. It is important for students to get into good habits
in their research towards a dissertation or a thesis. In this, the conceptual
framework is of central importance. Students need to consider:

- planning the conceptual framework carefully from the beginning of their
  work;
- using time fruitfully in a planned way;
- keeping a log of research to note key moments, decisions and choices
  for or against processes in the work, and moments where ideas,
  concepts and meaning become clarified and extended;
- getting into good habits of writing up drafts as they proceed and ensur-

ing they engage with concepts or ideas and meaning throughout their drafting.

Planning provides students with a route through the journey of their research, but it does not have to be a blueprint for rigidity, closing out new ideas. All research contains some surprises, some unpredictable develop-ments; that is part of its contribution to the field, to knowledge and to origi-nality. Being open to surprises and needing to incorporate changes as a result of findings is not the same as having no real plan in the first place.

The student's conceptual framework is the framework of ideas, questions, theories and methodologies that help them ask and develop the ideas under-pinning their research and thesis/dissertation. It keeps them focused. Having a conceptual framework means that what they discover from their reading, fieldwork, experiments and explorations can be seen to be underpinned by their initial questions and theories, to arise from them and go some way to answering or addressing them. Students need to identify those key concepts and theories that inform and drive the asking of their research questions.

For PhD students, who experience a viva in which they literally defend their research and their thesis, there is usually a question directly about what this conceptual framework, skeleton or scaffold *is* in their work. For MA and undergraduate students, the readers of the dissertation will be looking for evidence of this framework because it shows how, naturally and logically:

• *concepts* or underlying ideas have been questioned, problematised and explored;
• ideas, aims and questions are underpinned by and enabled by particular *theories and theorists;*
• *research methodologies and methods* actually serve as the vehicle by which the student asks these theoretically underpinned questions.

The framework also allows readers to *analyse and interpret what they find* – be it themes in an author, responses from a focus group, documentary evidence from archives, or statistical responses to a questionnaire in relation to underpinning ideas, concepts and themes. Readers can *draw conclusions* and perhaps make recommendations (depending on the dissertation or thesis) based on these questions, aims, theories, methods and findings. Conclusions should be both factual and *conceptual* – understanding and ideas should be clarified and actioned, meaning added to and enhanced.

An activity follows that you might like to carry out with your students to help them clarify their conceptual framework at the beginning of their work.

Activity

Briefly consider your developing conceptual framework.

1 How clear are the *ideas, aims and questions* underlying your research and work for the dissertation/thesis?

2 How are your ideas and questions underpinned or enabled by particular *theories and theorists*? Which theories and theorists will you be using? And why? And why not others?

3 How can your *research methodology and methods* act as the vehicle by which you ask these theoretically underpinned questions? Which methodology and which methods will you use and why? And why not others?

4 How can you *analyse and interpret what you find*? – whether this is themes in an author, responses from a focus group, documentary evidence from archives or statistical responses to a questionnaire, so that you can *draw conclusions* and perhaps make recommendations (depending on the dissertation or thesis) based on these questions and aims, theories, methods and findings. In what way can you analyse and develop categories and themes and ensure that the theories which underpin your work are brought in to help underpin and interpret what you find?

Some examples of areas of research

How could you support and help the student to develop research questions and conceptual frameworks for the following areas and intended outcomes?

• 'I am interested in researching how first world countries help third world countries to develop and to adopt the successful practices of the first world countries.'

• 'I want to find out why hospital nurses, who know about safe practices, still do not take appropriate precautions in their work.'

• 'I would like to look at writers who are interested in writing about representing the self, modern ones, a bit like Virginia Woolf.'

• 'I want to find out how effective my programme is to help stroke victims overcome physical and psychological problems and get back to health and work.'

An example of finding a conceptual framework

Let us take an example of a research interest or area and turn it into a question with the beginnings of a conceptual framework.

- This student wishes to look at 'airline terrorism'.

One of my first questions as supervisor is:

- Why is this interesting, and interesting *now*?

Then I want to know:

- What is it about airline terrorism that interests you?
- What angle are you taking? And what kind of research is this?
- Is this a theoretical exploration into the range of airline terrorism, its effects, its prevention, and spectacular examples?
- Or is it a practical, experimental, experiential study, using fieldwork, experiments and empirical evidence?
- Will you be looking at examples using documentary evidence, e.g. newspapers, or perhaps you have had first-hand experience? Or do you know someone who has?

The exact question will dictate the theories and concepts used to underpin the research, the methodologies and the methods used to ask the research question, the design of the study itself, and the ethics. If this student intends, for instance, to find out at first-hand how airline terrorism operates, he might be involved in contacting hijackers. This could be unethical and problematic. How could he have access to hijackers? In addition, how could he deal with what they tell him? Should he keep their identity and sources secret? Alternatively, he could interview survivors, but confidentiality emerges again. The nature of the question affects the theories and concepts.

This student might need to read in the following areas to find current and established work and theories:

- Piracy (probably the first form of travel terrorism).
- Political groups and their ways of making their views heard.
- The airline industry, its growth and development in relation to needs and difficulties.
- Bravery and heroism.
- Developments in terrorism, particularly airline terrorism.
- Responses to airline terrorism, especially within the airline industry.

Narrowing the question and introducing key questions about topicality, gaps in knowledge, boundaries and 'doctorateness' will help to focus the question. This helps the student to frame a question that is more likely to be

asked and, to some extent, answered by the conceptual framework in action, articulated through the methods and approaches taken.

After applying this process to the idea of 'airline terrorism', the research begins to narrow down to: 'the effects of the increase in airline terrorism on precautions taken by airlines'. This is much more manageable, although it is important to ask: Which airlines? Is this a general survey or an in-depth study?

How can the student gain access to this information? If he or she does gain access, there will be problems of confidentiality, since airlines would not necessarily want readers to know about their security precautions. There are still many ethical issues and problems of access to the sample or population.

The student will need to address these questions in order to not only narrow down but also access and action his or her question. Working on an area and turning it into a question with a conceptual framework when addressing this kind of study is a time-consuming activity and can become obsessive. If we force students into our own interpretation of what needs asking and how it can be asked, they might lose interest and ownership. They also need to know that asking research questions is a finely tuned management of issues in practice to do with context, access, theories and concepts in action, appropriateness of methodologies and methods, and, often, human interactions.

If the student asked this question in a *deductive* manner, for instance, he or she would use hypothesis testing, checking out in his or her research, perhaps, whether airlines have responded to a provable increase in airline terrorism or the felt threat of it, based on interpreting the threat in a number of ways. The deductive piece of research would probably involve circulating a questionnaire to airline management and staff, for instance, or to passengers experiencing increased security arrangements, or obtaining some documentary analysis of management and policy documents detailing new procedures and so on. If the research is *inductive*, the student is more likely to be asking questions, interviewing, observing and conducting focus groups to discover whether there is an increase in security and an increased sense of the potential of airline terrorism, and how people are responding to it. A model of perception and response could then be built from the inductive, largely qualitative research carried out.

Moving from a topic to a framework

Different approaches and conceptualisations of the problem might be equally valid, while others may not. As a supervisor, it is your job to work with the student to develop a research question, conceptual framework and design of

the study that can be actioned, yielding interesting, useful, achievable results, and to ensure that the student is engaged with the development process, owns it and can be empowered to take it forward. Otherwise, it might turn out to be more your project than theirs.

Figure 5.3 illustrates the process of identifying, conceptually underpinning, planning and actioning a research project, that is, asking a research question in action.

Students could find it useful to talk through ideas and links between questions, information and data with a colleague as they work and after their initial attempts at writing. This should help them organise and clarify their work. 'Work in progress' seminars help with this ongoing process. Peers can

Topic - fascination - directive

Research question – asking a question problematises and focuses

Boundaries
Decide which elements to focus on and
what to leave for others/later

Theory
Which theories and theorists have
written about this and can be used to
underpin, inform and drive the
research?

M**ethodologies
and methods**
Which methods inform and can ask
research question?

Gap
Ensure it addresses a gap in knowledge
Ensure it is significant – important enough
for the level (BA, MA, PhD) of the
research

Concepts
What are the key concepts or ideas
underlying this question? How can we
problematise and unpick these?

Literature searching

Reviewing in a dialogue with own work.
Set up and explore arguments linking with
both question and argument. Ongoing
throughout research in thesis – theorists
inform all work.

Design of study
Decide on methods and vehicles
Decide on timeline
Decide on population / primary sources
Decide on data collection and analysis

Doing the research

FIGURE 5.3   DIAGRAM ASKING THE RESEARCH QUESTION

ask each other questions about the conceptual framework in action, how and why the student has used the theories, methodologies and methods used, what boundaries were drawn (what was left out, what they chose and why) and how they have had to make decisions, change direction, etc., because of the way the research has proceeded. If seminars are not possible, then students are advised to work with a friend, family member, mentor or colleague to ask and answer the same questions of each other's work.

In the USA and University of the West Indies models, students have structured work-in-progress seminars where they share their ideas, conceptual frameworks and work to date. In some instances, this is formalised and assessed, while in others – for example, the PhD group at Anglia Ruskin University studying English, or the MA Women's Studies group on the 'Knowing Women' research methods module – it forms part of the session, encouraging formative feedback and support.

▶ Developing the framework of different chapters

The different areas your students will have considered when writing their proposal provide a key to the main elements of the developing dissertation or thesis. For your students, you could use this as a document to provoke discussion about the production of elements of the proposal.

Shape of the dissertation or thesis as it develops

When your students consider the actual shape of the dissertation or thesis, they can bear several models in mind. There is both the *story or narrative focus* and the *argument*. Every part of the dissertation or thesis contributes to this narrative and argument.

A dissertation or thesis often has a narrative or storyline running through it and some secondary storylines. These are the trains of thought or argument in which investigations, readings and findings fit. Suggest to your student that they start by thinking what case or major argument they want to make, then consider the questions they may need to ask, where and how they might ask them, the research methods and vehicles enabling them to ask questions and start to answer them, the main reading and theories informing their work, and how this all fits together. Then they can explain and tell the story of how the elements of their research design put the research question into action, asking and even answering it. Broadly speaking they consider:

- The research area and how they have defined the topic and questions.
- Thoughts and arguments exploring why they are asking certain questions and using certain methods in particular ways to help explore the research question.
- Discussion, analyses and reports on work they have done, discoveries and arguments, and the way some information leads to other thoughts, links to other information and ideas and helps develop arguments further. This involves looking at data that they are producing, analysing it, asking it further questions, speculating, making creative leaps and producing ideas, and drawing ideas and findings together.
- Some of the solutions, conclusions and thoughts on future work – recommendations for others' developments, actions and explorations beyond the scope of the dissertation or thesis.

The narrative focus explores problems and surprises, changes in approach and unexpected hitches, looking at how and why the research proceeded or proceeds as it does. When they have finished, the dissertation or thesis will read like a story or journey. Keeping a log or journal helps inform awareness of the stages, and for those undertaking a viva, the journey could be a theme or section of the argument running through the developing dissertation or thesis, so that each element articulates with, links together, draws from and is connected to each other element. The reader is able to follow the argument from questions or hypotheses, through what can be asked of and interpreted from the data, and turned into findings. The argument coheres throughout, and ideas, theories, data and interpretation contribute directly to it; it is built from them. There are no theories or references to literature which do not contribute to the argument and build up reasons for it. There is underpinning theorising to firm the argument up, contribute to the interpreted and discussed work of others through the literature, to set up and maintain debates about ways of seeing and ways of interpreting and valuing what is being argued. There is no evidence or interpreted data without a claim which fits in with the argument, and no claim made without the evidence and interpreted data to back it up. The students' written argument is the spine, the central point around which all the dialogue, evidence, statements and findings fit. Apart from commenting on the journeying research processes, they do not need to write about all the other details and information met while going about their research, except and only when it relates and contributes to the argument.

▶ **Discipline differences**

There are differences between dissertations and theses in different fields of study. Humanities dissertations and theses tend to concentrate on exploration of arguments in a storyline throughout, rather than having extensive sections on methods and findings. Often, conclusions are used as a way of conceptualising the contribution and worth of what the student has found and shown, overall, to be proven and well-founded in the reading. For visual and other artists, the developmental creative process and production of the artwork is itself a piece of research in action. Defending and explaining can be a challenge, but communication is important, otherwise the product just exists. The processes of thought and development leading to it need exploring and explaining, as does what the final work might contribute.

Social science and health-related dissertations and theses tend to have more complex defences of methodologies and methods, more explicit chapters detailing both factual findings (data from fieldwork) and conceptual findings (how this contributes to debates in the field, to knowledge, and the overall meaning of what they have developed and discovered).

Science dissertations tend to set up a hypothesis, establish the theoretical underpinning and identify the methods. Less defence is needed with standard or well established experimental methods and processes, so students present data, analyse, and draw findings in a discussion, then present conclusions from these. If they are establishing a new method they need to defend it. When experiments fail or hypotheses are refuted, and they create something new from this, they need to explain the stages through which they have gone and the decisions made. Chapters in science dissertations and theses are more likely to be concerned with looking at, analysing and interpreting information and data and moving conclusions forward to new stages of investigation, then coming to some proven contributions and suggesting further work.

Models

It will certainly benefit your student to look at other people's dissertations and theses in similar areas. These will probably be lodged in the university library. Suggest they do not get too embroiled in the arguments, but look at them for shape: the abstract; the way the arguments are introduced and maintained between chapters; how the introduction sets the scene and conceptualises the work; how the conclusion contains both factual and conceptual conclusions; and how the scholarly apparatus of references, appendices, etc. operates.

Activity

Ask your students to look at a number of dissertations or theses in areas similar to their own and to 'gut them', i.e. analyse how they develop, how they are structured, how they use the literature in their own arguments, how they develop an argument, and how they interpret their data and draw conclusions. Using more than one model means they won't see this as the only way to write. If they can step back and abstract, view the shape of a typical journal article (like a mini-dissertation), dissertation or thesis, then they might be more able to see the logic behind the different sections/chapters, which helps develop the theorised argument and interpret the findings based on the research evidence collection, in whatever form that takes.

Ask your students to think carefully about the following aspects:

- the shape
- the introduction
- how to produce an abstract for this field of study
- the conclusions
- how they deal with conceptual findings and contribution to knowledge, as well as facts
- how links of underpinning theories informing the work and emerging themes can be traced through the dissertation or thesis
- look backwards and forwards between the beginnings and ends of chapters (thesis) or paragraphs and sections (dissertation and journal article) to see how arguments are introduced, linked, changed and developed in the text
- see how evidence, interpreted data, is being used to build up an argument and a claim for some significance, something new.

It is advisable to read a couple of introductions to see how context, ideas, questions, arguments and contribution to knowledge are established, and to consider conclusions to see how both factual and conceptual conclusions are developed. Finally, students can look back to the research question and the thesis/dissertation/journal article as a whole, focusing on its overall, internal coherence.

▶ **A basic plan for a dissertation or thesis**

A typical plan for a dissertation or thesis would look something like this:

- title
- abstract
- preface/acknowledgements
- introduction
- literature review/theoretical perspectives – in dialogue with your own work, your contribution and arguments
- methodology and methods (including the design of the study, sample, timings, choices made)
- results and discussion – presentation of results, findings, data, and some discussion
- separate chapters in science for briefly introduced data followed by discussion of results, then interpreted
- for social sciences and humanities, data and discussion are integrated – sections or chapters use interpreted findings as they explore key themes in a dialogue with theories and previous work
- conclusion, containing (a) a summary, (b) factual, and (c) conceptual conclusions and, although unusual, in some instances, possibly (d) recommendations, if this work set out to solve a problem, probably in a professional context
- appendices/statistical tables and illustrations
- references and bibliography

Advice to student

Running through a dissertation or thesis is an argument and a narrative or storyline that develops by linking the underpinning reading, themes, theories, ideas, methods, findings and arguments together. Students should get into the habit of going back and forth through the dissertation or thesis as they write it up, and editing carefully to ensure that this coherence develops – taking a reader clearly and logically through the work.

Activity

Ask your students to consider the following questions:

- Look back over the research questions formulated and the brief outline of what the dissertation or thesis will be about, and at your developed proposal, especially the theoretical perspectives element.

- How clear is this?
- How logical is it?
- What is the gap in knowledge that the research addresses?
- What are the boundaries?
- What are the main theories being used to underpin the questions asked and the interpretation of what is discovered/evidenced?
- What are the main debates in the field by those critics and practitioners who have written about their own work? And how do these relate, to underpin your own work? What does your work contribute to the dialogue?
- What methods are being used and why, or not being used and why not?
- What is the scope of the work and what other or further work is there for others to do?
- What shape should the dissertation or thesis take and why?
- Will any appendices be needed, what sort and why?

In the period before the viva (if the student is undertaking a PhD thesis), the conceptual framework may need some revision and clarification so that the student is ready to articulate it when asked (see Chapter 20). For *all* students, the framework must clearly underpin their work so that even in the conclusion it is evident that conceptual conclusions (adding to understanding, meaning and theorising) can be drawn *as well as* factual conclusions.

▶ **Further reading**

Hussey, J. and Hussey, R. (1997, 2003) *Business Research: A Practical Guide for Undergraduate and Postgraduate Students* (London: Macmillan Press).
Mullins, G. and Kiley, M. (2002) 'It's a PhD, Not a Nobel Prize: How Experienced Examiners Assess Research Theses', *Studies in Higher Education*, 27(4).
Wisker, G. (2010) 'The "Good Enough" Doctorate: Doctoral Learning Journeys', *Acta Academica Supplementum*, 1, 223–42.

6 Enabling students to carry out a successful literature review/ theoretical perspectives chapter

> The process of the literature review involves the researcher in exploring the literature to establish the status quo, formulate a problem or research enquiry, define the value of pursuing the line of enquiry established, and compare the findings and ideas with his or her own. The product involves the synthesis of the work of others in a form which demonstrates the accomplishment of the exploratory process.   (Andresen, 1997)

A successful literature review engages students, researchers and writers in a dialogue with the literature, theories, writing and arguments in their field and helps to set the pattern of critical thinking and good writing. It is the vehicle for identifying the theories, and the use of these theories in practice in the published work of critics and other researchers, and the themes and the arguments in the field. In the literature review, the student situates him- or herself in the field and in the dialogue, engaging the previous and current work of others in a manner which shows understanding of the arguments and contributions made in these works. The student also shows how his or her work will extend and depend on or add a particular slant, edge or extra perception to that ongoing dialogue. Literature reviews can be extremely solid and plodding; however, an exhaustive coverage of all the literature without noting, analysing or drawing into a dialogue merely shows busyness and hard work, rather than a grasp of the major arguments and issues towards which the student's work is contributing. In the literature review, students show their engagement with the literature through their reading, and they begin to make use of others' arguments, and the work of key theorists whose theories and interpretations will guide the focus and analysis of their own research and arguments. It is the section of a journal article or

dissertation, and the chapter of the PhD, in which we can see the conceptual, critical and creative work beginning to emerge, although often in first draft it tends to be informative and descriptive, evidencing much reading which is not yet formed into themes and arguments. Supportive problematising and developmental feedback for us as supervisors can then help the student to move beyond this evidence of relatively undigested hard work, into managing it, weaving it together, and adding his or her own voice. We discuss more about voice in Chapters 00 and 00, which continue to look at the writing process.

This chapter considers:

- *what constitutes a literature review and theoretical perspectives chapter*
- *how we might encourage students to undertake a successful literature review*
- *literature searching*
- *the ongoing literature review throughout the dissertation or thesis*
- *engaging students' own work with the literature – summarising, analysing*
- *critical evaluation, contributing and engaging in dialogue*

Students frequently mistake a literature review for a semi-annotated list of books and journal papers that they summarise and write about, so showing they have read in the field. When we ask them to go off and read certain texts or find out and forage for literature that is both absolutely fundamental and topical in their area, we are actually asking them to engage in the academic community, to enter into a dialogue with work in the field, rather than undertaking a note-taking exercise. However, since much reading takes place early on in their work, by way of an introduction to the field, students can tend to feel that a rather sterile record of literature is required. They might not be fully aware of the debates at this stage, and may feel that, as they are starting out in their research, they have little to contribute to an established field or ongoing arguments. However, becoming involved in debates is essential if their work is to make a contribution to knowledge in the field. They need to enter discussion about the topic and question they have chosen, knowing their work will engage in dialogue with established, ongoing literature. An old habit of accumulation-oriented note-taking will not provide the basis for this informed dialogue. Students need to

determine a series of themes, arguments, paradoxes, dilemmas and key issues. To do this they must read critically. The supervisor's role is to engender interest in critical reading and engagement to feed into their developing work, encouraging a critical, problematising, analytical, reflective attitude.

There are several reasons for literature reviews. Students need to read themselves into the field of study in order to gauge where their own ideas fit, what can inform them, what others think and have discovered, and in what ways their area of questioning and research could contribute to existing knowledge. This might seem a tall order, because they cannot possibly read everything that has been written in their field of study, and probably, unless it is very specialised, not everything about their particular area. By searching out the literature to which their own work will contribute, they are not trying to cover and summarise everything. This would be an endless, daunting and ultimately pointless task. They need to read the background literature to contextualise and underpin their own work rather than substitute for it. This indicates to readers and examiners that they know the field and have something to contribute to it. Our research into moments when students cross conceptual thresholds and start to work at a new conceptual, critical and creative level (Wisker, 2010) singles out the chapter or paragraph in which students engage with the literature review as an absolutely critical moment – the understanding that this is more than a list or evidence of busy reading, and is, rather, a synthesising, analysing, critiquing and developing of the themes and arguments of the literature in order to engage with the way their own work builds on it and contributes to it. It is where they can develop their own right to contribute to knowledge in their own voice. It is a crucial moment in the development of a research student's work. Supervisors interviewed comment that when students engage with the literature, they send them back to the literature if their work is not at a significantly conceptual level. Also, students comment on those moments when they really understand their work and how it makes contributions to the creation of knowledge.

▶ Developing critical thinking as part of dealing with the literature

Critical thinking is crucial in postgraduate research, and much of this involves questioning and problematising accepted ideas and information. It involves engaging in a dialogue with others who have developed theories and carried out research. The engagement with these theorists and critical users of theories in their own research practice takes solace in the literature review, where the student begins to become thoroughly immersed in the

theorising, debates and developments in the field. Ultimately, what students are doing with their literature review is creating a dialogue between theoretical perspectives and research activity undertaken by others and their own research activity, entering the discipline and issue in a dialogue, and indicating how and where their own work contributes something new to this dialogue.

You might like to focus your student on the importance of the literature review as a way into managing reading, entering critical debates, keeping good notes, and writing critically. Some universities produce guidelines for students, usually online.

Activity

This exercise will gauge the skills students have to conduct a literature review. Ask your student to read a literature review in a journal article or a dissertation/thesis then consider their own skill levels against it. Ask them:

What skills do you have already and what do you need to develop?

- literature searching
- finding and using subject indexes and abstracting databases
- selective, analytical use of the academic online service provided by the library to access journal articles
- searching via the Internet more broadly
- quick and effective reading
- summarising
- reference-keeping
- interweaving reading and notes into arguments and discussions.

Review of relevant literature

Candidates should demonstrate that they have detailed knowledge of original sources, have a thorough knowledge of the field, and understand the main theoretical and methodological issues. There should not be undue dependence on secondary sources.

The literature review should be more than a catalogue of the literature. It should contain a critical, analytic approach, with an understanding of sources of error and differences of opinion. The literature

review should not be over-inclusive. It should not cover non-essential literature nor contain irrelevant digressions. Studies recognised as key or seminal in the field of enquiry should not be ignored. However, a student should not be penalised for omitting to review research published immediately before the thesis was submitted.

A good literature review will be succinct, penetrating and challenging to read.

(Available at: www.ioe.ac.uk/doctoralschool/info-viva.htm)

Literature reviews or theoretical perspectives chapters differ to some extent in different fields of study or subject areas. The sciences and some social sciences require extensive literature searching and review before the research question is posed. The literature tends to be written up in a separate chapter at the beginning of the thesis, known as the theoretical perspectives chapter, or literature review, to establish key theories against which the argument and research are developed. In the humanities, extensive reading is also required, but will be filtered into the introduction, establishing the theoretical background, underpinning theories and critical approaches. Key theorists informing the thesis will appear both in the introduction – setting the scene for research questions and major arguments of the research and thesis – and then throughout the work itself, taking different elements of the thesis argument on in different places and providing a coherent thread of reference for key arguments and ideas. For all dissertations and theses, theories and theorists, and the literature of the field, are referred to throughout in a coherent fashion.

Students must not stop reading early on as if it were only a stage in the research, but should be encouraged to keep reading throughout. It is perfectly possible that new discoveries or key texts will appear close to the end of their work, and students will need to acknowledge these, if only to say that they could not be incorporated into the research design because of when they were produced. This shows they have an awareness of the field, of the learning conversations taking place within it, and can see where their own work contributes.

▶ The literature review

The literature review establishes theories underpinning the research, and historical and current debates in the field which use these theories in their own practice. It provides background and context, involving reflection and

analysis. This is the place to indicate where the student's enquiry and research will be located, and what underpins it, rather than to discuss any findings. As well as indicating the underpinning theories and the ways in which they enable a perspective on the research question and area, a litera- ture review deals with the theories in practice and identifies emergent themes and issues using publications which are based on theorised primary research.

In this respect, the literature review: 'seeks to describe, summarise, eval- uate, clarify and/or integrate the content of primary reports' (Cooper, 1985, p. 8).

According to Andresen, the purposes of a literature review are:

- becoming familiar with the 'conversation', in the subject area of interest
- identifying an appropriate research question
- ascertaining the nature of previous research and issues surrounding the research question
- finding evidence in the academic discourse to establish a need for the proposed research
- keeping abreast of ongoing work in the area of interest

(Andresen, 1997, p. 48)

An essential part of planning a student's research, the literature review helps the student develop his or her own line of thought, keep abreast of progress in the subject and field, and make contact with others working in the same field. Examiners looking for how far a thesis or dissertation contributes to knowledge in the field will concentrate on the literature review or theoretical perspectives chapter in the first instance, then seek to find theories and argu- ments woven throughout, and finally tied up with the conceptual conclu- sions. Being able to develop a critical hierarchy of works read and used, of key theories and themes, and more peripheral theories, themes and argu- ments is an important task for students, whose work needs to be focused and coherent.

Literature review in the sciences

Science students will read in the field and develop a discussion with the key theorists and texts. Their literature review is likely to be a shorter piece than that of a humanities or social science student since much of what is read and discussed is to contextualise the experimental work, establish the theories underpinning this work, explain the reasons why the particular scientific method was used and so emphasise the contribution to the field which this piece of research makes. Defending and explaining the method is essential in

their work, although often the method will have been chosen by their super-visor, and/or to suit the larger project. While a social scientist or philosopher might well spend the whole first year reading to produce the literature review, a scientist is more likely to engage with the research in practice itself, then read to contextualise theories and embed their work after the experimental phases. The literature review itself then will also be a shorter piece, less exploratory, more explanatory and confirmatory since the explo-ration is carried out in the experimentation.

The literature review in the arts and humanities

A literature review or theoretical perspectives chapter in English and other Arts or Humanities fields would be likely to involve discussion of the methods of critical approaches derived from theorists who underpin the ways in which we can understand, theorise and interpret issues dealt with by writers and readers. This helps us in interpreting the theorists' representa-tion of arguments and ideas, and how they do this through language, imagery and form. In my own work, for example, I would be likely to read and work with insights into issues, ways of looking at the world, and argu-ments offered by postcolonial theorists, feminist theorists, structuralists, deconstructionists, etc., whose work is being used to ask questions. I might well be working with a student on a literature thesis looking at the ways elements of texts engage with their context, and he or she might well be using key theorists such as Foucault, Bakhtin and Said, and establishing, for instance, Marxist historicist or postcolonial ways of reading and critical analysis. Sometimes the texts are the subject of the study itself not only the source of theory underpinning it. The ways that key texts will be read and debated are, then, informed and interpreted by using the lenses offered – the theorised perspectives of the theorists themselves, throughout the explo-ration and discussion of the literary works in context. Although those theo-rists have not themselves usually commented on the works being studied by the student, their perspectives are being used to interpret the texts and the ways the texts engage with and represent issues and arguments through form. Working on literary texts, my student and I would discuss the interpre-tations enabled by the perspectives offered by the theorists and also those offered by critics, perhaps recent voices who have worked in a similar field, or with similar issues, using the same or similar theorists to help them with their interpretations and arguments. The literature review section would weave the underpinning theorists' work with the use of these theorists, and with critical work of other critical writers, particularly those dealing with similar issues or the same author. The student would then gather these threads together and expose the way in which he or she has woven them

together in his or her own shapes and patterns. The student would develop his or her own theories, critically underpinned interpretations, and perspectives from that weaving, also highlighting arguments and new points, where the work fits into the dialogue, and how it adds to it, extends, enriches, deepens, and deviates from it.

In terms of form and shape in a literature dissertation or thesis, arguments would be established in an introduction incorporating the theoretical perspectives, and interact throughout the whole thesis. A methodology chapter, as such, would not be needed, unless different research methods were used, for example, by using interviews as well as textual or artefact analysis. Most literary theses will explore the texts, critics and contexts rather than carry out any empirical research.

▶ Literature searching – the library and Internet

There are several activities associated with handling a literature review or theoretical perspectives chapter. Literature searching is one activity.

Students need to explore their university library and associated libraries, using a computer to help search online journals and academic online catalogues, using Google Scholar, for example. While this is a different experience from that of investigating recent editions of a journal in a library, and finding related journals as a result, or for books, searching shelves close to a useful book, the digitalising of books and journal articles means for many researchers that the unheard of and unattainable source can be accessed from our computers at home.

Supervisors could advise students to look in the reference sections of key books and articles they are using, and of others' theses on similar topics. Here they might find something that could be a minor reference for others' work but could possibly be a key reference for their own, due to differing lines of argument. Put students in touch with specialist librarians to run a literature searching session for them, or advise them yourself, showing them how to use the academic online journals, going through the library using passwords so they can access whole essays and abstracts. Searching key researchers and those who publish in their field using the web of science or the web of knowledge, typing in their name, exploring the range of work then tracking back into the people they have cited and exploring their work can all be done from one's own PC.

Using email and the web to keep in touch with other researchers and their supervisors is also important (see Chapter 13) because others might have found key theorists or critical writers in the field and be able to pass on the links.

There is often too much information on the web, it is not quality-controlled and it is unlikely to be organised so that students can use it, so they need to be careful with managing, organising and sifting it. Students who merely download topical material are plagiarising and are not showing how they might engage with this material in a dialogue. It is important to explain what is plagiarism and what is good academic practice. Many students, even postgraduates, inadvertently reproduce material through poor study habits rather than setting out to deceive and pass it off as their own. Critiquing and constructing knowledge require interaction with it, and modelling that interaction or offering good examples of it in practice in journal articles, or your own work, might well help prevent inadvertent plagiarism.

Activity

Ask your students:

- when and where they have used libraries, online library facilities, CD-ROMs, digital books and journal articles and the Internet more broadly for research;
- which libraries they might need to join and whether they need a letter of reference, signed by you, to gain access to another local university library, for example, in their home town;
- what experience they have of accessing subject indexes and abstract-ing databases;
- whether they need to gain, develop or update their skills in using Internet online archives and online subject indexes.

Online literature searching – for your students

In your own library

Although the software will differ, libraries carry online public access cata-logues (OPAC) to help students search the library using, for example, author, keyword, subject or book title. COPAC (for UK students) enables students to search a number of university library holdings, and your university might also have an agreement with specific other libraries for such searches and exchanges. If students want to order books or journals they can do so through the library interloan service, which collects items from libraries with copyright collections, for example, the British Library at Boston Spa (UK).

There is often a charge, and a heavy fine for the late return of books, although journal articles (copies) can usually be kept.

Ask the library about online journals and information databases. The former is a cheap way for publishers to enable readers to access writing in their field. Tantalisingly, often only extracts or abstracts appear because one's university does not have a full subscription, but you can usually identify suitable essays and can either order them through interloan or find them in their entirety by going through the various information gateways (and sometimes contacting the author directly). Information databases are exclusive and are bought by libraries. They can be searched using keywords. Subscribing to Research Alerts, Journal Alerts and RSS (Really Simple Syndication) feeds can all keep students up to date in the work being produced in their field.

Via the Internet
Searching for appropriate, inspirational, essential and unusual but relevant reading is rather like foraging for food or hunting for treasure. It requires a mixture of planning and tenacity, imagination and serendipity, then a lot of hard work gathering, selecting, and noting sources, interpreting and analysing, and using them in a dialogue with one's own work. For Internet searching and retrieval your students will need some familiarity with and access to a computer and browser (e.g. Netscape Navigator www.netscape. com/download or Microsoft Internet Explorer www.microsoft.com/ windows/ie/default/htm). If they are working from home they will need to be signed up to an Internet Service Provider (ISP). They will also need to find which search engine they feel comfortable with, for example Google (www.google.com) and then Google Scholar for more focused and refined searching. Although this seems really basic, we can't take it for granted that all have the same skills and access. For some of our students, Internet access is a rarity. If they live in remote areas, in countries where there is little Internet access, or if the centres where the Internet is accessible are far from where they live, they might think of what we take for granted as a real luxury. Such students who are at a distance and need to access the Internet might find it useful to use facilities in the university and so require the opportunity to do so. In South Africa, for example, the open university, UNISA, has many students in remote parts of the country, working entirely at a distance, who have no local Internet access and some of whom have very little money. The campus provides computers and space for their students to come in and use the Internet. Some of the international supervisors with whom I have worked on a distance supervision course had to travel up to 120 miles to reach their nearest Internet access. Their master's students faced the same

problems and some of them had no transportation. All of this hampers acquisition and then management of information. They need the skills, the access and the provision, whether they can use it only rarely or regularly.

Accurate searching requires a little know-how and plenty of practice. Using exact keywords will help to limit what could be a huge list of hits. On a search for 'werewolves', I found a great deal of unnecessary items about wolves generally, and some rather nasty pornography (you will, it seems, *always* find pornography whatever search item you put in, even if university computers have filters). Ninety per cent of what I found was totally irrelevant for my work: sifting is crucial.

As a student's research becomes more focused and specialised, it is possible to look at academic databases straightaway. BUBL can be accessed at: www.bubl.ac.uk/link and there are many more specialised websites and databases for the sciences, social sciences, medicine and art – for example, the social science information database: www.sosig.ac.uk.

Library online portals or gateways usually list many of these online websites of databases for students to access. In the UK, the various subject centres and funding agencies have websites that can be searched for articles and recently published reports, or discussion documents. For learning and teaching, for example, try the Higher Education Academy (HEA) website at www.heacademy.ac.uk.

Using Google Scholar can take your students straight into academic articles and sift out some of the irrelevancies.

Another way of finding articles is to forage and search back from a name in the field, a journal article or a journal, using the Web of Knowledge or the Web of Science as appropriate, at: www.isi.knowledge.com. That brings up choices of author, topic or journal. Author names need to be typed in with the surname first, then the initial. This brings up a lot of their publications, which can be refined on the left-hand side by selecting the field of study.

If this is all done through the university's library gateway/portal, the likelihood of direct access to the full text of articles is much enhanced. In the list of articles which comes up there are the title, names of authors, source – journal – and numbers of citations. Highlighting an article usually opens the abstract. If it looks suitable from the abstract and is available, the whole PDF can be downloaded. If it is not available then it will need to be ordered through interloan, bought direct from the journal, or found by going to a library which holds the journal in stock. Over to the right of the page there is a list of where the article has been cited, and this, too, can lead to further sources of related information. A trail of the article and author leading to another in the field can be established, and a range of interesting material accessed. Similarly, identifying the key journals which deal with the field

leads to exploring what else has been published, and sometimes other related and useful articles appear in this search. At some point the search needs to stop and the appropriate articles can be downloaded and saved for reading, to engage with, quote from, and reference.

Activity

Ask your students to explore the work of an author in their field using the Web of Knowledge.

They should find the author and the range of their articles. Pick an article and see if it can be downloaded, read/processed and whether it has references. Look at who has cited it, look at their work, and see if some of that article can be useful too. Open up the journal in which the article by the key author is published and see what else has been published in that edition and editions around that time. See if there is anything in there which is of use, map the journey, explain it to the supervisor, and show on one side of A4 what has been found, the extracts referenced, and how they (the student) went about it.

Although this seems laborious, it soon becomes second nature and is much quicker than getting a train and three buses to a library and hand writing notes from articles in the journal stock (which is what I used to do and still do sometimes). However, the latter is necessary if the work is old, obscure, not held by the Web of Knowledge International or not in a top journal.

Some foraging for journal articles in highly specialised contexts will still need to be done at source. My work on Fijian women poets does reveal more online than it did when I began it in 1994, but it is still much richer travelling to Fiji and looking in the library at the University of the South Pacific (and obviously takes much longer – but the context was very rich in 1994). Now, however, I have access to digitalised historical documents to help my research.

Students will also need to consider how to handle the information they gain in their literature searching throughout the research. One model suggests they should acquire a great deal of information, summarise the key points, keep careful references, and write the introductory literature review from this. Another view is that, as the literature review process is ongoing throughout their work, they will need to keep returning to the field and reviewing and re-reading, certainly catching up on new texts and new areas of study that become more obviously relevant as their work proceeds. A
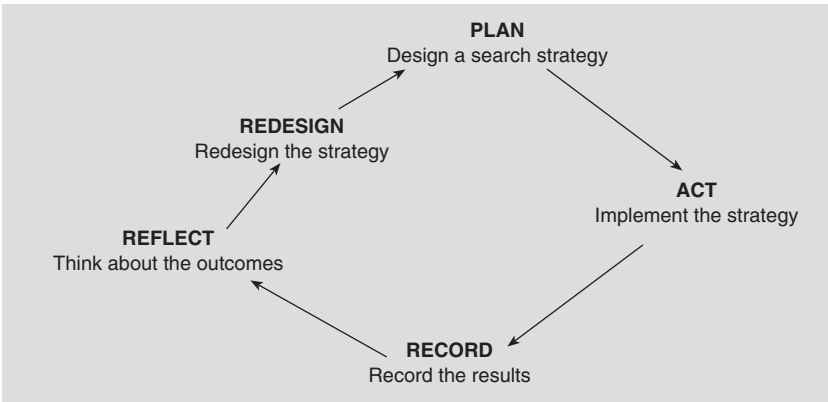
FIGURE 6.1   REFLECTIVE LITERATURE SEARCHING MODEL
SOURCE: ANDRESON, 1997, P. 16, INFLUENCED BY KOLB (1984).

reflective approach to literature searching is the most useful, that is, one that enables them to develop a cyclical approach: searching, processing and re-searching as new sources or new ideas become clear (Figure 6.1).

Literature searching leads to the incorporation of ideas, quotations, arguments and references into the student's own work as a background to and in a dialogue with that work. Students will need to establish a sound set of study practices and working strategies to make full use of ongoing literature searching, reviewing and incorporation. The metaphor of the dialogue is essential – there is an engagement, selection, acknowledgement, and inter-action with others' work, and a clear sense of how this builds on the student's own work, differs from it, how selected elements of others' work can be quoted and referenced to build into an argument, rather than to substitute for it, and how quotation and discussion go hand in hand; quota-tion on its own is little better than selective copying.

Some examples of searching and reading

After you have assessed what literature searching and analysing skills your students have, perhaps using the activities offered earlier in this chapter, you could ask them to look at the examples below and identify books, articles, chapters, etc. that they have found in each of the following places for their theoretical perspectives chapter:

• the university library and other specialist libraries (perhaps via online catalogues)
• their own bookshelves

- academic elements of the Internet
- catalogues of holdings
- bookshops, including Amazon online

Starting with a broad area, work out which aspects, theories, theorists and writers come to mind immediately to start researching. We will consider an example:

My research is into ways in which South African women writers expressed their sense of identity and cultural belonging during and post-apartheid.

Map of areas of reading: subject, concepts, authors

• Apartheid writers:	Bessie Head
	Zoe Wicomb
	Ingrid de Kok
• Looking for expressions of:	identity
	cultural belonging
	– what prevents this
	– what enables this
• Post-apartheid writers:	Zoe Wicomb
	Ingrid de Kok
	Farida Karodia
	'Like a House on Fire' collection
	What else?

These are just some writers and a few ideas about texts. More can hopefully be found, and some might only be available by contacting South African bookshops (e.g. Clarke's in Capetown, who have an online catalogue).

Another question can be posed: Are there any specific forms of their writing, such as:

- life-writing, semi-fictional, autobiographical?
- political treatise?

Now it will be necessary to discover some reference to life-writing, etc., in other writers, some critical work (for example, *Autographs* by Gillian Whitlock), or some examples on the web.

Theoretical issues and theorist
In this example, it will also be necessary to consider how to underpin the thesis writing using theoretical perspectives and theorists. These are a few which come to mind:

- Postcolonial theory   Childs, Williams, Said, Tiffin, Fanon,
                                  Kristeva
- Postcolonial feminist theory   Suleri, Spivak, Smith, Trinh Minh-Ha
- Identity theory   ?
- Cultural belonging theory   ?

Some interesting information has been found while searching the post-colonial and feminist areas, and some of the books will have been found or their position identified, but it still remains to trawl the library and the web to find key theorists in the other two areas, which in this case intersect with the original interests and question.

The next move is to consider narrowing and focusing the search on the specific examples needed, and broadening it to fill in the context.

- **Narrow search:** theorists and background reading in relation to the forms of their writing, i.e. life writing, semi-fictionalised, autobiography, political treatise, etc.
- **Broaden search** for background, e.g. culture, history, politics, other Black women writers dealing with identity, cultural belonging and/or using life writing or other forms

Note that once some of the reading has been completed, it will be necessary to sift out and extract the aspects relevant to the research project, but the student will have a broader underlying knowledge enhancing what he or she is able to write and argue.

Activity

You might find it useful to consider your *own* research area, brainstorm it and identify where you would find theories and coherent information. Next, work with your students in their topic area or another quite different area to practise searching. Set them a tracking activity based on a very small issue related to their topic and question, so that they have to become more familiar with the online journals, printed journals and more obscure sources of information. For example, if they are working in an area related to Higher Education and change you could ask them to explore the theme of 'the commodification of knowledge: students as consumers and commodities':

Find the Browne Report, produced at the end of 2010, by Lord Browne of Madingley (available online: www.independent.gov.uk/browne-report).

Find reviews of it in the *Times Higher Education* professional magazine (available online or in the library: Morgan, John (2010) 'Focus on cuts undermines value of Browne's report, critics contend', *Times Higher Education*, 21 October 2010, available at: www.timeshighereducation. co.uk/story.asp?storycode=413935, *Times Higher Education* (2010) 'Browne Review: How Britain Has Reacted', 13 October 2010 available at: www.timeshighereducation.co.uk/story.asp?storycode=413870).

Determine the main arguments, and the main immediate critical responses.

Find Martha Nussbaum's defence of the humanities: 'Not for profit: why democracy needs the humanities' (2010) (available on e-book or from the University of Princeton Press; also available at: www.britac.ac.uk/events/2010/ Not_for_Profit-Why_Democracy_needs_ the_Humanities. cfm).

Find another critical text: *The Global Auction: The Broken Promises of Education, Jobs, and Incomes*, by Philip Brown, Hugh Lauder and David Ashton (2010), Oxford University Press.

Find a review of this which supports its points: 'Brainpower for Sale?' by Dr Roger Rees (available at: www.open.ac.uk/platform/blogs/society-matters/brainpower-sale).

Then follow through from the critical review to useful links, such as: 'It's an education, all right', by Laurie Penny, *New Statesman*, 10 April 2011 (available at: www.newstatesman.com/blogs/laurie-penny/2011/04/british-universities-students), and 'The awful truth: education won't stop the west getting poorer', Peter Wilby, *The Guardian* (available at: www.guardian.co.uk/commentisfree/2011/feb/28/education-jobs-middle-class-decline).

The links are in the review, and through gathering the main points from the original text, review, books in critical opposition and reviews of those books, your student is able to see contrasting views and critical dialogues in the making. They are also practising the kind of sleuthing and foraging which is expected in exploring a research question.

Ask your student:

'What are the main arguments on the several sides of this issue of commodification of Higher Education and of students?' (*Having a question helps focus the foraging researcher so that he or she doesn't bring back everything on all connected topics.*) Then ask the student to use parts of the arguments – properly referenced and interpreted – from these sources to develop a short piece which shows the dialogue in process. (*Selection, defence of it, use in dialogue with your own views, identification of contrasting argument all help understanding and proper use of*

sources – in extract – to develop a sense of the field and the points raised, and to manage them in a dialogue with your own points. It avoids plagiarism because all material that is quoted is short, properly referenced and incorporated in the student's own interpretation and argument.)

Students should evaluate and reflect on what is happening in this dialogue and ongoing argument. They should see if there is anything else in another topical journal, newspaper, book or report which could add to the debate.

Ask them to collect and list their sources in Harvard style in a reference section at the end.

▶ **Searching, using and referencing**

Figure 6.2 illustrates in diagrammatic form an example of the brainstorming and searching process.

Note-taking activity
Students can usually take one photocopy of a journal article under copyright law. They will need, however, to take notes from and 'process' journal articles, books, chapters and other sources. You might think of working with individuals or a group to enable them to try the 'SQ3R' note-taking and processing method:

- **Survey** – quick read through
- **Question** – what was that about?
- **Re-read** – look through it all, reading it carefully; re-read only if necessary
- **Record**

    Take notes under main key headings (having identified these main points in the survey); take full quotations and full citations of other references to be followed up.

    – Summarise major arguments and quote to refer – always indicate with references where the ideas and the quotations come from.

    –Make some sub-notes and discussion points alongside these notes. Underline or highlight in colour the main ideas and arguments.

    –Start to structure the notes and process the arguments – under keywords, headings, and linked elements of an argument.
- **Review** – take a quick look back at the piece to check that the most important points and the main arguments have been caught; has everything required been noted? Have the references been recorded appropriately?

Area and questions

Brainstorm a range of ideas
- Examples
- Questions
- Theories
- Related topics

List key words

Identify names of texts

Identify names of authors

Searches can be carried out in all these forms and locations

Library • books
         • journals
         • documents

Google and broad internet trawl

Specialist academic online library trawl of e-versions of essays or abstracts

Then:
- Order
- Interloan
- Download
- Photocopy
- Take it out

- Read
- Take notes
- More sources

Now searching further look on related links (to broaden the reading) to show sense of the whole field coverage

Now use the arguments, examples, etc.
- in a dialogue with your own work
- to underpin it
- properly referenced

Now narrow field of reading specifically to the topic and argument boundaries so ensure definition

FIGURE 6.2   BRAINSTORMING A LITERATURE SEARCH

Are the quotations correct? Has anything been missed? (Sometimes a holistic sense of the discussions or continuation of the piece emerges at this stage.)

Critical evaluation

Guided note-taking of the main points of an article or book chapter is only the first part of a student's work, followed by making summarised notes and their selective use. Critical evaluation of the article or chapter for use in a dialogue with other work in the field and with the student's own research is also essential. When students read and critically analyse a paper or journal article they can also be asked to consider how it is constructed; where the theorising, argument, evidence and discussion take place; how the whole is hung together with an argument and underpinned by theorising; how contrasting views are used to develop a dialogue; how contradictions and problems are dealt with; and what kind of language is used in different parts of the paper, some descriptive and informative, some highly theoretical and discursive, and so on, This analysis should then feed into modelling for their own writing. We discuss this more in the chapters on writing.

Filing

Students need to keep full informative notes, either a card index file (rather old fashioned but good for those less comfortable with a computer), or on their computer, noting all the sources they consult, their contacts and correspondences. Using Endnote and other packages can help gather all the information about a source, which will then be present for future use and finally for appropriate referencing in the bibliography.

Keeping notes from reading up to date and carefully referenced on a regular basis will help students to remain engaged with the literature in a dialogue with their own work. Management of reading on a computer is one good way to both compile and reference reading; suitable software programs include Procit, Notebook, Reference Manager and Scholar's Aid.

Cataloguing reading

Students should establish a list of headings that fit their research – subjects, questions, theories, methodology and methods, etc. It is also important that they read papers and parts of books as soon as they get them and assign headings to the material, so that they can record it and later access it via these appropriate headings, for example:

- author
- title

• methods
• keywords and areas
• date of publication
• contribution to arguments in the field (e.g. 'discourse with Lacan over self-image').

Activity

Carrying out the beginnings of a review of a piece of literature:

• Trawl through (i) library, (ii) Internet, (iii) online academic journals.
• Select a journal article relating to the area of research.
• Process it using the SQ3R methods (see above).
• Write down the key points and the full citation details – the author, subject, etc. *on an index card*.
• Decide where and under which headings (author, keywords, area of argument, methods, etc.) to store the information so that it can be retrieved when writing chapters.
• Summarise the main argument as it relates to the current research interest. Note briefly any other areas of argument it touches on (you might need to return to this to use it for something else).

Students need to link these headings and areas to their file management system so that when the system is interrogated it indicates work collected under the appropriate heading as required.

This is obviously more sophisticated than a card index file, which tends to force the keeping of information under author in alphabetical order, making it difficult to go straight to information on a particular subject area. Card index files, however, are portable, cheap and can be marvellously idiosyncratic. Students will need to find the system that suits them and that they can manage. The most important element of any storage system is that the students have the information they will later want to retrieve – so ensure that they are aware of the need to acquire and keep information.

▶ **Using reading in their writing – ways of integrating and working with the literature**

A literature review is an engagement with the literature in the field, whether the underpinning theorists which help cast a perspective on the world and

the research question, or those who have used these theories or ideas in their own primary research and so built up the field into which the student's work is to be placed, to grow, and to which it will add knowledge and meaning, creating new knowledge and understanding. Ways of reading affect ways of writing, and there are different ways of reading, arguing and writing for different purposes. Students who read in order to collect and list, and repeat and summarise, need to move on from this exhaustive detailing and step back, identify the themes and arguments, the contradictions and contrasts, and the different points of view, and write about how these are expressed through and developed through the literature. They then need to indicate how the emerging themes and arguments feed into and will be enhanced by their own work so that they situate their own work as part of the ongoing dialogue.

Forms of reading, and using that reading in writing

- *reading on the topic* – accumulating information, establishing the field – provides facts and basic underpinning ideas you use in your work and in writing arguments
- *contrastive reading* – identifying discussions, debates, disagreements, different positions – helps you to critique and ask questions, then argue in a dialogue between experts/others/your work
- *analytical reading and writing* – How does this work? What is it made of? What lies behind it? How does it fit in or not? Is it coherent? Why does it matter? Take it to pieces, find conflicts and arguments.

Activity

Ask your students to consider in general terms and in relation to a draft of a literature review chapter or a section they are producing for you:

- How and where in this piece of text are *your* reading, research and writing:
  informative,
  contrastive,
  analytical,
  evaluative,
  critical?
(NB. If it is *only* informative, *only* descriptive, it won't be at postgraduate level.)

- Where do you engage in dialogue? and with what main theories and arguments?

- How are you using (1) the arguments, and then (2) the words of others in your own work?

- How and where have you been analytical, critical of and engaged with the work of theorists, critics, and others' research data?

- How and where have you been analytical, critical of, and engaged with what your own research will add to/develop/disagree within these other writings and how will it do this?

- What are *your* points and arguments? Can you pinpoint where they appear in this piece of text? Where and how are you referring to your own explorations, questions and findings?

I have found it useful to discuss with students some of the attitudes and behaviours which could limit their literature review, so that they can determine ways of ensuring that it engages with the theorists and critics, continues throughout their research, is up to date, informs their research question and interpretation of their findings, and ensures their work is in a dialogue with and makes a valid contribution to the field. A good literature review which does all of those things should enable a student to fully engage with the field at a sufficiently conceptual, critical and creative level for their work to be of good enough quality to gain a postgraduate qualification, while an undergraduate literature review section should seek the same outcome, but will be shorter and less wide ranging. The descriptive literature review which never moves on from being merely descriptive will not be a good start for engaging critically with their own data and findings, and developing a convincing argument throughout the dissertation or thesis. It is a crucial part of their work to get this right.

▶ Developing 'voice': party analogy

Some students work well by engaging with written sources informing them about how to do something, others by trial and error, others by visualising the flow of thoughts, as we have tried to model with some of the diagrams in this book, and still others through stories and analogies. I use cases, models

or stories to engage the imagination and thinking processes. I also developed the analogy of the literature review and the developing of a voice as entering a dialogue, like joining a party.

See if this analogy works for your students.

You have been asked to a party; you have the invitation in your hand (you have been asked to join/been able to join an intellectual community in a discipline or field). You approach the door and knock to go in (enter the discipline) but you really don't feel as though you have a right to be in there with the others, the other guests, and the hosts, yet. However, in you go.

The room is spread out in an interesting way. Over in the corner there is a bunch of older, very serious, strange looking people, mostly men – mostly, actually, old dead men, with maybe one old dead woman. These are the absolutely key theorists in your field and are related to the way in which you will theorise your research and your argument, interpret your findings and make a contribution to knowledge. For me, they are likely to be Foucault, Derrida and Julia Kristeva (not all are dead and one is a woman). They are talking learnedly and sound very serious. You know you need to listen to them so you spend some time listening, taking it all in and thinking.

Then you move to the wider party and here you find younger people, more women, many from international origins, and they are hotly debating some of the things the old dead men have been theorising. They're relating it to their own context/their own spheres of thought/their own interest – and they disagree with each other or back each other up and elaborate on what each says. You listen for a while and then you realise you agree a bit with one, not so much with another, and see a connection appearing between one and another. You know that your idea and work will fit here – so you mention what one says and point out what you agree with here, and how you disagree with what another says. You mention what they used as evidence and how it relates really well to what one of the old theorists suggested, and is helped by what they said. Then you say the work they are doing is aligned with what you are saying in terms of – but disagrees with or disputes what you are saying because … .

Now you have your voice and your right to speak, and you have entered the dialogue.

This analogy is risky because it could seem frivolous, and not everyone works by analogy, but it has always worked for me with supervisors and students.

Activity

Ask your student or students to consider what to say to, and how to deal with, the comments (a) to (h) made by these students?

How can you work with and help other students who say the following (and what are the problems here?):

(a) There are no books in my area; it is a completely new area and question.
(b) My theorists are diametrically opposed – help!
(c) I know nothing about this topic/area – where can I start?
(d) I just need to know who are the RIGHT theorists and critics to use – please tell me (so I don't have to do all this reading).
(e) It's all been said before … what can I add?
(f) I don't want to read those writers because they might disagree with my argument.
(g) I've done the lit review – now I can leave it and do all the research.
(h) I'm going to do my lit review and work on my theorists after I've gathered my data.

Some thoughts in response to this activity:

(a) It's good that this is new – you have identified a gap in the knowledge and your work can make a contribution to knowledge. However, it could be that you need to search further and more deeply to see what is related to your area, has a similar focus and uses different keywords. One of my own students looking for 'regional colleges' found he needed to look up UK literature on 'access' and 'widening participation', US literature on 'affirmative action', and Australian literature on 'enquiry'; the areas were related but the terms different.
(b) It is useful if the theorists and critics have different views and interpretations. This can help start an argument, so you can develop and introduce your own argument. You need to take note of their differing interpretations and views, back them up with reference to their work, and then indicate how your work relates to or differs from and develops in relation to their work.
(c) On the one hand, maybe this is not the right topic to start with, since it will take so long to get fully immersed in the previous publications and

arguments. On the other hand, if at least some of it is new then this can be interesting and inspiring. The supervisor can suggest some key reading (but not all the reading – student needs to explore for themselves and do the reading themselves rather than have it summarised).

(d)   While we need to suggest the key theorists and writers in the field and direct the student to essential reading, it would be a very limited approach to just decide that there are a few right writers. There will be a debate going on in this field, and the student needs to relate to that and determine the relevant, good, bad and irrelevant or problematic points each produces. Then they weave their way through what is being said, and identify what their views and arguments based on their own research can add to this. There won't be a substitute for reading.

(e)   It often seems as though everything has been said before, that there are facts rather than choices and interpretations, and this is particularly the case in a very popular or overworked field. If it seems stale and over-worked then a new angle needs to be found, or a new topic. But the sense that it has all been said before assumes that what has been said is final, correct and there is no new approach, new context, new angle, or new interpretations, using different theorising and critical approaches. Wider reading, particularly focused critical reading which casts new light on an issue, should help so that they can see what their work will add and develop.

(f)   The road to developing an argument is to see that there *is* an argument to be made. Reading other writers, and engaging with what they have to say and making a well balanced case for a different view is a sign of working at a conceptual, critical and creative level. Examiners are also going to want to see such debates, awareness of different views, and recognition of them in relation to the direction taken and decisions made in the student's own work.

(g)   It does start the project, but it continues alongside it, as there is always new literature to engage with. So, no, it needs to be maintained.

(h)   As above, with an ongoing piece of work. Carrying out the fieldwork or experiments without any prior reading of the theorists and critics could well mean that the work ends up retaining what has already been discovered, operates at a descriptive rather than a theorised manner, misses key interpretations and directions which could help the work proceed, and might just be (a) descriptive and untheorised, and/or (b) disorganised – everything will seem to be relevant data, and there could be no sense of a direction, themes or issues running through a mass of ill-digested data.

▶ **Using theorising to start research and writing**

Themes, patterns and arguments emerge from reading in the field and theorists in the field. Good note-taking can help identify these patterns and the contradictions as they emerge. Some writers can structure their literature review around the themes identified as headings and subsections, in a linear manner, while others find it useful to express the links diagrammatically, as in some of the cases in the figures (above). For those who prefer to see the links, mindmapping tools can help, and several are available on the web. Drawing your own diagrams can also help. They could try the following:

Visualise – use diagrams to identify contradictions
With colleagues – state research question
Unpick ideas, concepts, problems, theories and contradictions
Express visually as a diagram
Start to build your arguments from the visualisation – explain to colleagues
Identify research strategies to approach questions, complications, contradictions – plan research activities

▶ **Ensuring the use of literature engages in a dialogue with the student's own work**

Select two essays in the student's own subject area that relate to the student's topic. Ask the student to carry out the following activity, which encourages him or her to discriminate between two different kinds of use of literature in his or her own research work. One (A) published example should be a poor model of a literature review. This could seem to be little more than a rather dead set of notes or a linked run through references to different essays or books; it does not engage in any kind of dialogue with the argument, and so it would be difficult to engage it with the researcher's/author's own work. The other (B) should interweave references to different texts, using appropriate selected extracts from them, which have been interpreted and discussed, and build on different points of view and the developing themes they represent. The researcher's/author's own work should be seen as contributing to this dialogue. This second example should act as a model for the student's own use of literature in their literature review/theoretical perspectives chapter or section of their thesis or dissertation.

If students can carry out this activity in a group they can benefit from discussing what they are reading, and determining how well or otherwise the

examples work to integrate and build on the writing of others, as the writer develops their own arguments.

Activity

Ask your students to read the examples you have chosen of essays that use a wide variety of literature and then consider the following questions:

- How do they use the literature?
- Is it a dead list, organised, only summarised?
- Is it vague? Too broad? Too narrow? Disorganised? Including reading which ranges too widely for the focus of the piece and its arguments to be clear?
- Do they summarise from the theorists and other writers in order to add to the debate or not?
- Does the author engage their arguments with the texts read and presented within these essays? Or do the texts look like little more than a book list?

Students can work alone, or, better, in a group, to discuss their responses to the different texts, collect these together on a flip chart, review the pros and cons of each piece of text, and compare suggestions of good practice in a literature review or theoretical perspectives chapter or section.

A good theoretical perspective or literature survey chapter should:

- not be a dead list of annotated comments about texts, but an ongoing dialogue with the experts, theorists and theories underpinning *the student's* research;
- indicate that the student has read widely (more than is needed) for context and debates;
- show that the library and Internet have been utilised selectively but thoroughly for sources;
- be firmly based on careful notes and recorded sources;
- summarise only in order to engage in critical debate – showing how arguments arise from, relate to, and are underpinned by the experts in terms of subject, themes and methods.

▶ **Further reading**

Andreson, L. W. (1997) *Highways to Postgraduate Supervision* (Sydney: University of Western Sydney)

Basch, R. and Bates, M. E. (2000) *Researching Online for Dummies* (Foster City, CA: IDG Books).

Cooke, A. (1999) *A Guide to Finding Quality Information on the Internet: Selection of Evaluation Strategies* (London: Library Association Publishing).

Greenfield, T. (ed.) (2002) *Research Methods for Postgraduates* (London: Edward Arnold).

Wisker, G. (2010) 'The Good Enough Doctorate: Doctoral Learning Journeys', *Acta Academica Supplementum*, 1, pp. 223–42, availible at: www.ufs.ac.za/journals_ActaAcademica.

7 Methodology, methods and ethics

Helping students to select appropriate methodologies and methods for their research is one of the key roles of the supervisor, supported by expert others, and by research development programmes. The supervisory role also involves advising students on how to research in an ethical manner, and to comply with the rules and regulations of research governance more generally.

This chapter considers:

- *helping students to choose appropriate methodologies and methods for their research*
- *taking ethics and research governance into consideration*

There is insufficient space in a book of this nature to cover the enormous range of methods that students could conceivably use to address their research questions or hypotheses. However, you will have expertise in a range of methodologies and methods which might or might not suit the research of your student. A self-reflective audit could be a first step, and you could subsequently repeat the audit with your student. What this chapter intends to do is focus on working with students to help them identify, clarify and then enact the methodology(ies) and methods which will enable them to conduct their research.

▶ Terminology

Methodology and methods

- **Methodology** refers to the overall approach to the research process, from the theoretical underpinning to the collection and analysis of the data.

- **Methods** refers only to the various means by which data can be collected and/or analysed.   (Hussey and Hussey, 1997)

It can also be useful to work with students to help them clarify some of the key terms that are used in research, often rather confusingly, especially those fundamental terms that relate to one's philosophical view of the world, which tend to underlie personal research approaches, constructions, inter-pretations of the world, evidence and research findings.

Broadly speaking, there is a continuum from our sense of reality or 'being in the world' (ontology), through our versions of what constitutes knowledge in the world (epistemology), to the methodology that might be used (posi-tivist, post-positivist, inductive, deductive and so on) to enquire about the world, and then on to the methods used to action an enquiry (interview, questionnaire, experiments, documentary textual analysis, etc.).

One end of the continuum is philosophical, the other is immensely practi-cal, that is, it stretches from theory and thought to action and interpretation. Having a conversation with students about world views, beliefs about reading and evidence, and beliefs about how and what you can ask or can prove from research is not an academic indulgence but an essential activity. Fundamentally, a researcher might, for instance, hold a view of the world that everything is describable, real and fixable, and yet be asking research questions about shifting perceptions that need to be interpreted according to individual perspectives and differing contexts. For example, a *positivist* world view based on realism is one that would lead students to believe their knowledge consists of discrete facts which can be pinned down, measured and quantified, and so phenomena can be understood. If students are then engaged in researching a political, social, psychological, philosophical, personally related, ultimately contextualised issue, they are quite likely to find they cannot fix a shared reading and measure evidence that proves a version of the world.

Let us take an example. Student J wants ultimately to contribute towards an improvement in Arab–Israeli relations, with research based on values, beliefs, perceptions and feelings, combined with cultural context. But, as a realist in a positivist research tradition, he seeks out a provable, fixable version of reality and the world. He believes that he can find data that absolutely and accurately provide information – so he uses a questionnaire – but he is looking at values (which shift and are ill-expressed). He is destined to find he cannot capture the reality he seeks, only data about people's stated behaviours and actions. He is likely to *miss* what he seeks – values and a change in these values. His world view (ontology) has directed his sense of how and what constitutes knowledge (epistemology) into a version

of methodology (positivist) and methods (questionnaires), which miss their aims and outcomes.

However, let us consider another example. Student F wishes to find out about sexual harassment in the kindergarten playground. Her assumptions are that it exists and that it is tolerated by the staff either because they do not recognise it or because they do not believe it to be a problem in this age group. She is therefore investigating the existence of a phenomenon, attitudes towards it and the behaviour of staff and children, both male and female. She knows she is studying something nebulous, contextual, to do with perception, so she *cannot* fix this reality with a questionnaire (nor would some of her subjects, children, be able to respond). Instead, she tries a mixture of quantitative and qualitative research methods – triangulation – to try and represent the phenomena. Observation enables her to see the harassment in process, and the categories she develops to analyse her observations allow her to fix certain kinds and levels of harassment, and of response to this (quite quantitative) method. Beyond that, she relies on looking at perceptions, attitudes, values, labels, interactions (very much post-positivist and phenomenographical), so she interviews using semi-structured (there are definite answers she wants to find out), open ended (but the interviews could yield some fascinating information she cannot predict) interviews with staff, with some focus group discussions with the children, where they explore their experiences and feelings about their experiences (values, perceptions, attitudes, rules, etc.).

Student E wants to find a cure for Alzheimer's, or at least something that might slow down its progress. In a variety of experiments, it appears there may be a link between proteins, fruit flies, and Alzheimer's behaviours. He sets up a series of tests, which he repeats, to determine whether there is a link between the protein, the Alzheimer's and the fruit flies. He repeats, varies, notes, and starts to determine fixed, provable results. He is a scientist, and his methods, repeated, prove an interpretation of interactions in the world. And if others replicate his experiments under the same conditions they should get the same results.

Supervisors might find it useful to work with students to consider:

- **ontology** (position, being in the world) – asking: Do you feel secure in your identity, believe that reality is shared, knowable and fixed, and discoverable through the right methods; or do you feel identity and 'reality' are contested constructions and representations, which differ in different situations and which we do or do not invest in?
- **epistemology** (knowledge construction) – How do you think knowledge is constructed and captured? How does this happen in your subject, your

view of the world and in context? Do you believe that through appropri-
ate methods we can find out truths, facts and answers? Or is that knowl-
edge constructed, perceived, contested and situated?

• **methodology** – Will positivist, post-positivist, post-modernist, inductive
or deductive methodology suit your research question? (These will need
to be unpacked in any such discussion.)

• **methods** – What methods can help you ask this question?

Following this line of discussion and enquiry should help your student to
determine the appropriate methodology and methods for their research.
Various terms are explained further in Wisker (2001b, 2007) and in the bibli-
ography attached to Wisker, *The Postgraduate Research Handbook* (2nd edn,
2007), of specialist texts to aid the use of particular methodologies, research
strategies, methods and vehicles.

▶ Quantitative or qualitative research?

Qualitative researchers consider that researchers make meaning, and that
the interaction of research and its outcomes is through a relationship
between the research, the methods used and the participants. Qualitative
researchers concentrate on exploring incidences, perceptions, relationships
in context and most often look at the meanings and interpretations rather
than the event or thing itself. This is on the understanding that reality is
modulated through individual and group perceptions and interpretations,
rather than being essentially findable and provable with experimental, fact-
focused means, which gather enough evidence to 'prove' something is the
case and always will be in such a context, under such conditions. Denzin
and Lincoln (2005, 2011) offer an extremely useful, updated, clearly
explained way through qualitative research. Other books your students
might find useful are Glynis Cousin (2010) and Maggi Savin-Baden and Claire
Major's work (2012, forthcoming). Qualitative research approaches help us
to interpret and understand situations, people and cultures, while quantita-
tive research results are more properly built from a view of the world as
more susceptible to analysis, and those using them can argue that it is possi-
ble to determine and test relationships between cause and effect. Because
both start with How, Why, What questions but have different ways of
approaching their answers, it is useful to prompt your students to consider
their beliefs about how and in what ways people can ask questions, discover
and interpret the information produced by asking these questions, carry out
tests, conditions, and explorations in order to inform decision-making, and

trust the findings they develop to inform such decision-making and subse-
quent action.

Hussey and Hussey (1997, 2003) offer a useful figure to help track beliefs
about the world, through to methodology and methods. While your own and
your students' methodology and methods are in relationship to world view
and to discipline norms, it is also the case that particular research projects
are better served by particular methodology and methods. You might believe
(as I do) that knowledge is constructed, and that we rely upon perceptions
which can never be entirely captured as fixed or 'real'. However, with full
contextual description and a recognition of the limitations of a study we can
still say that the interpreted data from the study indicate an outcome, a
behaviour, or an interpretation true for this instance and probably informa-
tive, if not always true in an identical fashion in similar cases. Some scien-
tists would be horrified at that because it sounds very imprecise. Using
experimental methods they will test, re-test and adjust when surprise, chal-
lenges and failures take place, until they can be absolutely certain what they
have found is a description of the case. They seek absolute truth and facts. I
seek interpretations which can be captured as soundly as is possible. The
typical scientist is a positivist; I am a post-positivist. I am a social scientist
and an arts/humanities (literature) researcher. In literature, the only facts I
can point to are dates of an author's life and publications, place of birth, etc.
and some description of content. Anything I say about the author's book is a
critical interpretation based on my informed perceptions. As a social scien-
tist, however, I am a little more duplicitous. I boldly mix methodologies, not
just methods. Typically, a piece of research I might carry out will begin with
a closed survey identifying behaviours (though these are based upon the
perceptions of the respondents). If I ask enough people who answer, I can
analyse the data and argue that the rest are statistically insignificant, and
that if the survey were conducted with the same group or similar, a similar
set of results would probably be discovered. Actually, I can't completely fix
the truth here, because I am relying on their beliefs and perceptions.
However, I can come quite close to this because of the numbers of people I
ask and the analytical processes I use to categorise them and label the
responses, so that this is seen as reliable and generalisable. My next step is
often to interview based on some of the interesting things that have emerged
from the survey. Subsequently, in the interviews and focus groups, I work
with small numbers, asking for perceptions and interpretations, and inter-
preting these within a framework which is informed by theory. Then I
construct case studies. These are informed by the data, interpreted by theory.
They grow from interpretations of the data, which produce categories, types,
trends, and different examples. Case types and trends in the data are then

described in an individual case, which is either (a) a real person (or manage-
ment situation, set of behaviours, whatever constitutes the case) as an
example of certain trends, or (b) a representative case where a case study
can be a construct of several examples which fall into the same categories.
In the former, the person (or otherwise) would be anonymised and/or given
a pseudonym, and in the latter, a fictitious label would be given, e.g. (a) Case
A 'Anne' (not her real name) and (b) The University of Poppleton (not a real
place, but a fictional construction of the worst things that can exist in a UK
university, invented by Laurie Taylor).

Hussey and Hussey (2nd edn, 2003) have a useful chart which might help
your students identify where their beliefs and research practices lie in rela-
tion to the question they are asking or hypothesis they are testing.

Positivistic paradigm	**Post-positivistic paradigm**
Concerned with hypothesis testing	Concerned with generating theories
Uses large samples	Uses small samples
Data are highly specific and precise	Data are rich and subjective
Produces quantitative data	Produces qualitative data
High reliability	Reliability is low
Low validity	Validity is high
Generalises from sample to population	Generalises from one setting to another

▶ Questioning and defending methodology and methods

Ask and consider with your student:

- What is your world view?
- How can this relate to your methodology?
- What research design suits your question?
- How can your chosen methodology or methodologies lead to your research methods?
- What research methods are you using and why? Consider the research journey and the thesis.
- How will your research design, methodology and methods enable you to:
  - ask your research questions
  - action your design

- gather the data you need
- analyse the data
- interpret the findings
- draw conclusions which are both factual and conceptual?

When your students reach the end of their research, they will be questioned explicitly about their choices, the appropriateness of methodologies and methods, why they did not make other choices, and how effective the choices they made have been in enabling them to acquire useful data and draw factual and conceptual conclusions, making a contribution to knowledge.

Some of the questions that *could* appear in the viva, focusing on methodologies and methods, are considered below, accompanied by some hints and tips on how to approach the answers, and some comments giving the examiner's point of view. These questions can act as a useful checklist for students to ensure they reflect on why they have chosen certain methodologies and methods to answer their research question. Additionally, the questions below give an indication of what an examiner reading a dissertation or thesis could be looking for. Finally, they can be adapted for use in a mock viva (see Hartley and Wisker, 2004, 2010).

1 What methodologies and methods did you select and why?

Hints and tips

- Did you explain why you selected the methodologies and how they helped you to ask your research question?
- Did you explore how the methodologies were used in operation?
- Did you explain why you selected certain methods, what they enabled you to ask and answer, and how you were able to combine methods to ask your question?
- Did you say why the methodologies and methods were particularly appropriate for the kind of data you were seeking?

The examiner's view
I want to discover why you selected the methodologies and methods in order to ask your research question and conduct your research. I expect to hear a defence of the choices and an explanation as to why these methodologies and methods enabled you to approach their research area, to ask questions and to interpret the kinds of information and ideas which resulted from your research. It is important that you can defend your choices.

2 Why did you not select another methodology or other methodologies/methods?

3 How did you gain access to your sample(s)?

Hints and tips

- Did you explain how you selected your sample?
- Did you explain how you enabled your sample and/or those related to them (whether people, objects or animals) to take part in the research?
- Did you explain how you gained any necessary ethical clearance for your research?
- Did you explain actual details of physical access – timing, regularity, numbers and frequencies, etc?

The examiner's view

This question seeks to find out how you gained access to your sample, whether people, animals, vegetables, objects, etc. I want to find out about the ways in which you gained ethical and other clearance for your work, which enabled you to gain access to your sample. I would like to know what strategies you used to persuade others to take part, or that allowed you to use their materials, animals, etc., and what kinds of permission you were involved in seeking.

▶ **Research governance**

This is the overarching care and quality control which ensure that research is well regulated, avoids harm, complies with guidelines appropriate both to humane and regulated behaviour more generally and to the regulations and rules of the discipline in particular.

It is defined by Imperial College, UK, in a healthcare research context as 'the broad range of *regulations, principles and standards of good practice* that exist to achieve, and continuously improve, research quality across all aspects of healthcare in the UK and worldwide'(www3.imperial.ac.uk/clinicalresearch governanceoffice/researchgovernance/whatisresearchgovernance).

▶ **Ethical issues and practices in research**

In the twenty-first century, most universities expect anyone undertaking

research to ensure that the work is ethical, and has been vetted and approved by a committee focused on ethical approval. It could be argued that the procedures for ethical clearance are so onerous and the bureaucracy so labyrinthine that students are put off carrying out research involving human subjects, however harmless and benign it might be. As a supervisor, you are very likely to be involved in supporting your students through ethical clearance. It is useful to remind students that ethics procedures intend to ensure that:

1   the research is designed to cause no harm, protect the rights and anonymity of those involved, and will be used in a positive way, which also causes no harm;
2   it is well designed, well planned and likely to produce results that contribute to knowledge. There are questions concerned with the research question or hypothesis and its match with the research design, methodology, methods and data analysis, all of which provide a useful check of coherence and likelihood of success.

Typical procedures and their history

Students undertaking research involving human subjects in medical or health procedures are expected to seek formal ethical approval. The aim of this is clear: to ensure that no research processes impinge on or infringe human rights, cause any kind of harm or reveal the confidential nature of the individual's involvement. Many health researchers comply with the Helsinki agreement that protects human subjects. Other researchers also now need to comply with similarly strict regulations.

Students undertaking action research are made aware of the need to involve their research subjects (not *objects*) as fully aware participants who collaborate in and jointly own the results of the research and any interpretation or use of it. In much feminist research, the same processes of agreement, openness and shared ownership are also commonplace. Many students carrying out experimental research using animal subjects have traditionally complied with complex scientific ethical procedures. Students engaging in research into text analysis are less likely to find they need any ethical clearance before carrying out their work. However, more students are involved now in multidisciplinary research, or research using a variety of methods. Text analysis accompanied by interviews of the authors would be a case in point. This latter method, using human subjects (in interview), would need ethical clearance, and a commitment that details are kept confidential *or* are approved for release by the participant(s) by informed consent.

Universities have codes of practice and, often, ethics committees over-seeing approval. You will need to guide your students on whether their work needs local ethical approval, in which case, following your own determination that the research complies with ethical rules, often an approved colleague can be the recognised approver. Then, the student can get on with the research, only returning for further approval if, for example, the sample, population or methods used change in the process. They need to discover if they must seek full ethical approval or not, and if so, how to complete what could be a very lengthy application. Students are also strongly advised to do this in advance of the data collection because data *cannot* be collected until approval, if it is needed, is given. Applications could wait months for the next sitting of the ethics committee, and any subsequent referral for clarification would hold up the entire research enterprise.

Supervisors should not only support students but also help them with their timelines, so that they are usefully carrying out literature reviews, other preparatory research and so on while awaiting approval (not idly waiting anxiously). There are apocryphal tales of students on master's dissertations (six months) who gained their ethical clearance at the point of submission. For PhDs there is, at least, a longer lead time.

Below is an example of an ethics checklist used at Anglia Ruskin University in the 1990s, for those research projects which are:

1   *not* merely library- or literature-based;
2   *not* being carried out in schools as part of a Higher Education course (when the project is approved by the appropriate school/college authorities);
3   using human subjects.

Ethics checklist

1   Does the study involve participants who are unable to give informed consent? (e.g. children, people with learning disabilities, unconscious patients)
2   Are drugs, placebos or other substances (e.g. food substances, vitamins) to be administered to the study participants?
3   Will the procedures use human tissue or include the penetration of a participant's skin or body orifices by any substance or device?
4   Will participants be presented with painful stimuli or high intensities of auditory, visual, electrical or other stimuli?

5   Could participants be required to undergo long periods of sleepless-
ness, confinement, sensory deprivation or any other form of stress?
6   Is there any foreseeable risk of physical, social or psychological
harm to a participant arising from the procedure?
7   Will deception of participants be necessary during the study?
8   Will the study involve more than a minimal invasion of privacy or
the accessing of confidential information about people without
their permission?
9   Will the study involve NHS patients or staff?

Even if 'no' is the answer to all the questions on the checklist, when using
human subjects, postgraduates and staff send copies to the committee and
complete a full ethics clearance form, in addition to producing participant
information and participant consent forms. Undergraduates and taught post-
graduates (those not doing dissertations) need not do this, but *all* staff and
students must abide by the university's ethics rules: causing no harm, ensur-
ing confidentiality, seeking participant compliance, and observing data
protection regulations.

Completing an ethics approval form as part of a supervisory discussion
helps students to focus on their research, and some sections can often be
filled in by copying and pasting in parts of the proposal. It is ultimately a
useful metalearning activity because it foregrounds rationales of research
and research design. In answering the questions on the form, students often
realise flaws in their research design. Additionally, students are expected to
develop: a participant information sheet; a contact letter; and a participant
agreement/consent form. Human subject data must always be kept confi-
dential – under lock and key or on a password-protected computer.

A checklist for ethical approval could be used in a face-to-face discussion
with students, or expanded, with space for them to write answers. Included
below is a broad list of the areas which they will need to consider. You might
use this to ask them questions, before engaging with the full university checklist.

Students also need to think about whether they have ever had to 'do
things' to research subjects as part of a research project organised by
someone else. What is their role when it is not their research project?

Informed consent
Participants in research need to know the:

*   purpose of the research
*   exact procedures involved

- qualifications of the researchers
- funders of the research
- way in which the findings will be used
- consequences of not taking part in the research
- amount of time involved for participants
- effects on participants who do take part – will there be loss of dignity, side effects?

> To consent to something means that you *agree* to it. But to give *informed* consent implies that you have sufficient information to make a valid judgement.   (Robinson, 1992, p. iii)

Those who *cannot* give 'informed consent' include:

- people who do not speak fluent English and who do not have access to an interpreter
- children under the age of consent
- people who are either mentally handicapped or mentally ill
- people who are acutely ill, terminally ill or dying, and those who are very old, frail and infirm
- embryos, foetuses and the deceased.

> Not all these categories are clear-cut, and people vary a good deal in their capacity to make decisions. In many such cases, consent to participate in research would be obtained from guardians or next-of-kin. However, they might not be the best people to decide what is in the best interests of the client concerned. And nurses may find that they are asked to advise on whether their clients are able to give informed consent or not. (Robinson, 1992, p. iv)

Ethics are broader than obvious harm, however:

> Eroding dignity and confidentiality are real issues in health research. Although the researcher is obliged to respect confidentiality, they are also obliged to disseminate results, including an account of what happened.
> This tends to be more of a problem if specific features of the research make the subjects easily identifiable. For example, the research might be about a new therapy available only in a few centres, or it might concern a problem which affects only a very small group of people. Just as the researcher needs to take steps to ensure the people in the study cannot be identified as individuals, it is important for any practitioner involved in the research to make sure that the policy is maintained.   (Robinson, 1992, p. v)

Codes and committees

Because ethical issues can and do arise so frequently in research of any kind which involves human (or indeed any living) subjects, a number of general and specific codes of practice now exist.

> The production of ethical codes began after the Second World War when the horrific results of uncontrolled experimentation on human subjects carried out during the war was revealed. The Nuremburg Code of 1947 spelt out the principle of informed consent.   (Robinson, 1992, p. v)

The Declaration of Helsinki stipulates:

- clinical research should be based on adequate scientific principles and research design;
- the individual conducting research should be scientifically qualified;
- the inherent risk to subjects should be in proportion to the importance of the research objective.

Therapeutic research (benefits the research subject) and non-therapeutic research (has no obvious benefit to the subject) are distinguished, and stringent constraints are placed on researchers undertaking the latter.

Ethics issues also include access and truth so, in some instances, students might find that either they cannot get access to the people or information they need, or they meet a whitewashed situation, missing the real issues they set out to research. Considering access to pensions, Bulmer notes:

> Organizations as settings for research have a number of special features. They are bounded institutions to which one must seek, negotiate and gain access. Once admitted, the researcher must establish a workable and convincing role in which to gather data.   (Bulmer, 1988, in Bryman, 1988b p. 151)

Suspicion can result. Researchers in applied settings describe being seen as 'spies' (Hunt, 1984; Johnson, 1986; Warren, 1988). Initially, those being researched might be suspicious of a researcher in their midst. Lorraine Gelsthorpe (1990) recalls that the officers in the prison in which she was researching:

> thought it was particularly devious of the government to employ 'women as spies' (p. 96), and she found it difficult to convince some officers that the researchers were not working for the government. Bryman (1988, p.

> 16) sees one of the chief difficulties of researching in organizations being
> that researchers are 'often seen as instruments of management who are
> there to evaluate or spy on their subjects and will report their findings
> back to senior officials'. The presence of a researcher is feared, writes Lee
> (1993) in his book on researching sensitive topics, because of the possibil-
> ity that they will reveal deviant activities, and the researcher is seen as
> explicitly seeking such information.   (Horn, 1996, p. 551)

Power is as much an issue as access. Dingwall (1980) comments: 'in a highly
structured organization, such as the police, a "hierarchy of consent" can
result in researchers obtaining official permission to conduct a study, but
receiving only token co-operation from those lower down the hierarchy'
(Horn, 1996, p. 552).

Respondents should understand the aim of the study and feel that the
researcher will listen to them and be trustworthy (Buchanan, Boddy and
McCalman, 1988, p. 59). *Who* the student is might also help or hinder, and
the student certainly must be honest about the role. Researchers have to
establish themselves in an acceptable role and might have to undergo loyalty
tests: 'Ethical issues arise from clashes between personal and professional
interests' (Easterby-Smith et al., 1991, p. 64).

> Ethical problems may be greater, therefore, when researching a group
> whose values and world views are very different to one's own. In order to
> be accepted by the group, one must, to some extent, deceive them, in that
> one must appear to sympathize with their beliefs and the way they view
> the world.   (Horn, 1996, p. 552)

Role play can lead to compromise, especially with groups at odds with the
researcher's values. Alan Bryman notes that researchers 'brought up on a
diet of text books and sanitized research reports sometimes report their feel-
ings of something being wrong with themselves when things do not go
according to plan. It may be far more responsible to make prospective
researchers aware of such facts in advance than to imbue them with self-
doubt as their plans go awry' (Bryman, 1988b, p. 9). Ultimately, reflection
and self-awareness result, enabling researchers to understand the processes
of research and produce more credible results.

Participants in your students' research will need to know what will be
done with the data; how it will be kept in a safe, secure environment, a pass-
word-protected PC; and, if appropriate, whether it will be checked by them
(as in the case of interview transcripts) if used, and only used for the project
for which they provided it.

Culturally inflected research ethics

In some instances, the taking of information from people feels to them like theft, and participants might well be wary of releasing information if they feel it could be misinterpreted or used in an inappropriate way. Linda Tuwihai Smith, with Denzin and Lincoln (2008), consider the issues of cultural impe-rialism when dealing with the rights of indigenous peoples and their data, in this respect. Misrepresentation and misinterpretation can be a product of cultural assumptions and a lack of contextual information. It is better to find out about the cultural context, ask for insider support in understanding the protocols and interpretations, and ensure that the researcher is representing the people with whom they are researching as subjects not objects of the research, with their own rights and individuality. Bruce MacFarlane's (2009) book concerning researching with dignity is also helpful here, since it traces a problematic history of dealing with culturally varied participants with less than dignity, and also questions some of the established ethical practices of both scientific and social science research, thus alerting us to behaviour to avoid and precautions to take to protect human rights and avoid misrepre-sentation.

Organising appropriate methodologies and methods, as well as ensuring ethical clearance, consent and confidentiality, are sensitive issues crucial to the researcher's own sense of involvement in and responsibility with the research, the field, sample, group and data. Sensitive negotiation of ethical issues is necessary to enable students to carry out useful (and safe) research.

▶ Further reading

Bryman, A. (ed.) (1988) *Doing Research in Organisations* (London: Routledge).

Denzin, N. K., Lincoln, Y. and Tuhiwai Smith, L. (eds) (2008) *Handbook of Critical and Indigenous Methodologies* (New York: Sage Publications).

Gelsthorpe, L. (1990) 'Feminist Methodologies in Criminology: A New Approach or Old Wine in New Bottles?', in Gelsthorpe, L. and Morris, A. (eds), *Feminist Perspectives in Criminology* (Buckingham: Open University Press).

Horn, R. (1996) 'Negotiating Research Access to Organisations', *The Psychologist*, December.

MacFarlane, B (2009) *Researching with Dignity* (London: Routledge).

8 **Supervisory dialogues**

Supervisory dialogues are at the heart of research students' learning. Supervisory dialogues, whether face-to-face or through electronic means, are the main way in which we work with our students' to encourage, direct, support and empower them to get on with and complete their research and writing.

> *This chapter discusses the function of dialogues in supervision. We consider:*
>
> - *the importance of supervisory dialogues*
> - *the varieties of dialogue in relation to roles, stages of a student's work, personality, other factors, and the kind of research the student is involved in*

I see supervision as a creative, challenging and empowering dialogue between supervisors and students, which works rather like a choreographed dance – matching learning behaviours and practices, research project, and learner differences to enable the best outcome. It is not the only dialogue, since students are also in dialogue with their peers locally and internationally, with those who support their language and editing, and importantly, with the experts in the field. In Chapter 6 we looked at the literature review, which represents the development of new knowledge and understanding in a dialogue with that which is already established. Dialogue builds mutual learning.

Supervisory guidance for postgraduate and undergraduate students has become an important research area in the last few years, as the numbers of international and home-based postgraduates increase. The supervisory relationship is the primary one for ensuring that a wealth of personal and cultural issues and experience are addressed, as much as for ensuring that students are guided and empowered to be autonomous learners engaged in

a topic sufficient to gain an MPhil, EdD, PhD, master's or first degree. For previous work in these areas, see work by Grant (2008), Grant et al. (2010), Aspland and O'Donoghue (1994), Acker et al. (1994), Brown and Atkins (1988), Delamont and Eggleston (1983), Lowenthal and Wason (1977), Phillips and Pugh (1994), Wason (1974), and Wisker (1998, 1999, 2000). For international students, in particular, different levels of dependency and need are also significant factors. Ballard and Clanchy (1984), and Ginsberg (1992) indicate that some Asian students, more used to the Confucian study model (particularly Chinese learners), are more likely to adopt learning approaches involving deference to authorities, accumulation of knowledge and a rela-tively uncritical approach, somewhat at odds with the problem-solving dialogue-with-experts mode of European and western research. My own recent work with academics in the Arab world for the British Council suggests this is also the case in those contexts. Students more used to a deference-to-authorities model might expect direction, where a western student might expect debate.

Other mismatches between students' expectations, preconceptions and the learning and research culture into which they are entering arise for both international and home-based students. Each could cause difficulties for student–supervisor relationships and the successful development of the research project. Potential difficulties arise as students move into different learning cultures and meet different learning expectations. This is probably particularly the case for postgraduates, whose study requires a learning leap and sustained focus on research, over time. Chapter 12 looks at cultural difference and international students.

▶ Undergraduates and postgraduates

There is a variety of roles and interactions for supervising undergraduate and postgraduate researchers. Research development and autonomy vary between levels, and also vary culturally, contextually and individually. Undergraduates are making first, significant steps into research methods, the management and planning of time and research processes, and writing up a substantial, significant piece of work. They will probably require more explicit guidance than postgraduates, more regular supervisions with more direction, and they have *very* limited time. However, they will also need to learn independence, research skills, time management and writing skills to produce coherent work. We might assume postgraduates have already made their first steps, but they too will need to learn about working with the scope, length and conceptual depth of this research project. As we look at supervi-

sory dialogues, it could be useful to consider what kinds of dialogues and roles, at which stages, suit your undergraduates and postgraduates.

The leap between undergraduate and master's-level work is matched by that between master's and postgraduate PhD/EdD/PrD, where greater autonomy and originality are required over a greater length of time for a longer, more significant project, making a contribution to knowledge, and justifying the award of a doctorate.

For students from professional practice, this can be a leap into *academic* work which involves them in theorising, problematising and conceptualising what might have been highly successful professional practice. Time is also an issue. Some students are given time to research, while others juggle full-time work with part-time research. Some work at a distance from their supervisors. Some expect the work they do will 'change the world' because of the scale of the project. This could lead to excessively grand aims and outcomes, and projects which are unmanageable in the time available (see Chapter 11 and Chapter xx). Such expectations can be so daunting that start-ing and maintaining work momentum seem almost impossible, and writing up looks like a life's work.

All research is a dialogue with other experts. All research needs bound-aries, to be realistic in its aims and outcomes and manageable in its scope. It does indeed feel like a life's work for many students, but for others it is a stage in their development as researchers, or a stage in their professional development – a vehicle for change and professional advancement. It is a time of all-consuming activity. As supervisors we need to be aware of various different motivational tensions, backgrounds and perceptions, as well as research practices that our students bring to the research process. We need to engage in dialogue with students, encouraging them, in turn, to engage in dialogue with published work in the field. This is a tall order for the new supervisor, but if the student is to be successful, the supervisory relationship is to work, and the research outcomes are to be at the appropri-ate level, making a real contribution to knowledge, then negotiating prac-tices, interaction and learning conversations based on both insights and good use of training, development and experience are essential. See Chapter x for the establishing of good ground rules to underpin this process.

Students' research is relatively autonomous. They need to be gradually weaned away from reliance upon supervisors once the project is well-established and has been approved. Students also need development opportunities and guidance in research methods throughout their research process, with increased guidance and support as they complete, write up final drafts and submit their work. This represents a tension between the hands-on support and the hands-off encouragement of autonomy, an autonomy which

will enable the graduate or postdoc to conduct their own research projects. Gurr's supervisory alignment work suggests (2001) that mismatches between excessive hands-on approaches and a desire for autonomy (competent autonomy), or hands-off approaches and students' need for support, are common in supervision. When we look at supervisory dialogues, the actual practice, we are aware of these different potential conflicts and balances, and of the language we can use to engage students in the research process, and into gradual full ownership, empowerment and control.

Research students are engaged in dialogues not only with their supervisors but with other experts in their field, involving themselves in the contribution to knowledge. The development of high-level dialogue skills, both verbal and written, is essential for students and supervisors, or the outcomes and research product might only be a work of deference and synthesis. Students need to contribute to the knowledge and research culture in their fields, and to do this they need to develop dialogue skills. Many of these will begin in interactions with their supervisors, who draw out questions, engage in debates, set off trails of thought, help focus work and thought, and enable students both to conform to the needs of the research degree requirement and to conceptualise, plan, act and complete their work using the appropriate problem-solving, risk-taking, creative, original strategies.

▶ **Supervision as a learning conversation**

In many ways, supervision is a form of teaching, and research is a form of learning. However, supervision is far from the didactic teaching mode found in the Oxbridge tutorial model. Learning conversations between students and supervisor are dynamic and engaged.

In discussing varieties of supervisory relationships, Ingrid Moses cites Hartnett and Katz (1977) who suggest that staff should give more time to supervision and so 'assess the students' intellectual development'. That is not enough in itself. Supervisors should, say Hartnett and Katz, become more 'nurturing to postgraduates in both attitude and practice'. This means being aware and responding to 'the developmental and situational ambiguities in the lives of many graduate students' (Hartnett and Katz, 1977, p. 652).

Anthony Love and Annette Street see supervision as collaborative problem-solving. An integrative approach to postgraduate research education (1998, p. 149) better prepares students for the forthcoming world of work, where skills of collaborative working are more likely to be welcomed and useful to prospective employers than the isolated individualism of lone

academics of the past. Their argument for the nurturing of collaborative skills relates largely to employability and lifelong learning.

> The problem-solving approach requires that both sides be able to take the perspective of the other person and see the questions from his or her wisdom or viewpoint. This also wants the supervisor to be supportive and show real care for the learners while at the same time being as tough as possible on the problems they encounter. It is growth-oriented, and the unique perspective of the supervisor allows him or her to set goals that are designed to challenge the student, without being overwhelming or threatening.   (Love and Street, 1998, p. 154)

My own arguments concur with these, but I would also stress the necessity of collaboration and interaction as collegial equals in order to empower students to undertake and maintain momentum with their own research, while ensuring that the responsibility and self-awareness this involves encourages them to own both process and outcomes. This process is begun when working with undergraduates engaged in research, although at this stage in their research learning careers and with a short project and time span, undergraduates usually need *more direction* and guidance than many postgraduates. Nonetheless, they also need to begin to enter the problem-solving experience, including development which 'ensures that the supervision is responsibility-focused, with the student moving from an almost entirely dependent situation in relation to the supervisor, to one of matter interdependency' (Stoltenberg, McNeill, and Crethar, 1994). Love and Street (1998) see the interaction as matching that of organisation in life, avoiding individualism and seeking collaboration. Additionally, they recognise the difficulty of maintaining such a relationship when giving bad news which needs to lead to developmental responses:

> there are times when the supervisors have to be very tough and let the candidate know when things are not going right. The ability to offer criticism and feedback, while still maintaining a developmental focus, is probably the most challenging task for a supervisor to accomplish. A balance has to be struck between being supportive and caring, yet tough on the problem.   (Love and Street, 1998, p. 155)

Latterly, the didactic supervisor–student interaction has developed into conversations between committee or supervisory team members, where it is important to share and develop the facility with the discourse of discipline research, and of research learning, master's or doctorateness. Supervisory

dialogues enable students to engage with the discourse and in a range of dialogues, from those which identify and refine research questions and problematise given concepts, through to those of argument and defence, all of which use the language of the discipline and the level of the research. Knowing when to advise, inform, problematise, challenge, promote, critique and nudge the stages of the research is important for a supervisor. Different kinds of supervisory dialogues are helpful with different individuals or different projects at different stages. Learning contracts could be a sound basis for proceeding to developmental and problem-solving interaction (see Chapter 4). They provide a way of objectifying and agreeing working relationships which, when things go wrong, can help both student and supervisor to agree ways forward. However, as we have seen in Chapters 2, 4 and 00, supervisory relationships are not always as enabling as we might hope, even if we try and make them so; power and hierarchy affect dialogues as they do supervisory relationships more generally. Accidental, ingrained or deliberate dialogue responses based on power differentials can silence and disempower some students who are less used to challenging or taking control. In her work on supervisory interactions and dialogues Barbara Grant (Grant et al., 2010) identifies the play and improvisation which takes place in supervisory dialogues where ensuring that damaging power dynamics are avoided and mutually engaging and engaged improvisation enables an intellectually charged creation shared between and built jointly by supervisor and student. Grant's earlier work (2008) builds on the Hegelian model of master and slave to problematise the view of the cosy supportive supervisor–student dyad. In 2008 she argues that the often difficult power relations are also both pleasurable and a 'fruitful necessity', so emphasising the importance of challenge, as well as joint engagement. The elements of improvisation are explored through examples in the 2010 essay, which emphasises the importance of this engagement for developing researcher identities. I would argue that the joint dialogue and improvisation of the supervisory interaction, and the joint dialogue of the developing understanding and articulation of the research through the text, enable conceptual, critical, creative research quality and researcher development.

However, as Grant points out, building on Sandra Acker and colleagues (1994), this developmental and creative dynamic might be curtailed in the context of the need to complete quickly for funding purposes, where a more directive style seems more suited. For Acker and colleagues, students are seen as flexibly responding to changing circumstances, and supervisors as becoming more directive 'as they struggled to get students to complete their work more quickly according to the norms set by the [funding body]' (Acker et al., 1994, p. 496). Grant comments that something valuable and develop-

mental is lost in this process, so that 'When such dynamics become standard, the communal, time-consuming work of "coming" to know' is in danger – yet it is an essential element in the formation of both the academic subject and creative academic work' (Grant et al., 2010, p. 284).

In relation to student learning and project diversity, we need to consider ways we can develop 'productive learning conversations' at all stages of the student's research.

Supervisor colleagues from outside the UK have commented on the different tones that students from different cultures might find acceptable in supervisory dialogues and supervisory interactions. Research into supervisory dialogues (1998–2004), with international and UK students in dialogue with supervisors in a number of discipline areas (Wisker, Robinson, Trafford, Creighton and Warnes, 2003), has led to the identification of interaction categories.

At different stages in a student's work, the supervisor needs to engage in a variety of modes of interaction: to guide, prescribe and inform, confront, elicit, clarify, challenge and critically engage, support, summarise and help move the student on. It is a dynamic, long-term human relationship between students, supervisors and a body of work. There are bound to be both learning leaps and blockages: there will be disagreements and times when students have to recognise that they have to fulfil certain requirements or recognise that progress is dependent on them and their ability to problem-solve, make choices, take risks, be original, and pull together ideas and information into a synthesis, and to engage what they have read in a dialogue with literature and theoretical underpinning. Following our thematic analysis of dialogues (Wisker, Robinson, Trafford, Warnes and Creighton 2003), supervisory questioning themes were divided into 11 intervention categories, developing and drawing on John Heron's (1975) 'six-category intervention analysis':

- didactic
- prescriptive
- informative
- confronting or challenging
- tension-relieving/social
- encouraging and facilitating analysis and a conceptual, critical approach
- eliciting
- supporting
- summarising
- clarifying
- collegial exchange.

These dialogues also relate to the overall supervisor–student project relationship. The balance between 'hands-on' and 'hands-off' supervision differs with each student, each project and in different disciplines at different stages. We looked at supervisory styles in Chapter xx and considered the problems of excessive control and of 'benign neglect' (Gurr, 2001) in a context where the main aims are project completion, and for students to be able to develop and own the research skills which will enable them to go on successfully to the next project. Independence and autonomy are essential, but lack of guidance and care for the learning needs of the student can lead to distress and failure, and a project which is not completed. While, in the humanities, such a project might well be a personal goal of the student, in the sciences and some social science contexts it could also be a funded project. Failure makes everyone suffer. Too much control disempowers and prevents students gaining the ownership and the skills they need to move on. This is the students' own work and the aim is for them to learn the necessary skills to conduct research in the future. Explicit direction also removes ownership. Students who are very tightly directed, particularly at the stage of shaping the initial research proposal and design, might fully understand neither what you are telling them nor how to do it and might feel the research they are going to spend so much time on sounds more like yours than theirs. Dialogues need to match cognitive processes so that each partner understands the other. The language of the dialogue must also be appropriate, and three forms are required: (i) *communicative language* in which the supervisor and student can discuss the developing work; (ii) *subject language* in which they can discuss specific subjects, approaches, issues, epistemology, knowledge construction and expression; (iii) *meta-language of research* – words such as 'conceptual framework' and 'doctor-ateness'. These need to be fully understood by students and used in their work so that, as it develops and when it is presented and defended, they can stand back, and define and describe what they have been doing in a shared meta-language. It is in early stages of supervisory dialogues in particular that supervisor and student start to learn to respond to each other and to get inside each other's way of expressing, conceptualising, structuring and thinking – using these kinds of language. For students from countries different from the supervisor's, some language or tertiary literacy elements could complicate the process.

It is possible that the supervisor might take the process over, leaving students with a list of directives, a lot of writing on the text – with things to fix in some instances – and some confusion over exactly what is wanted. This could happen unless they have both matched language and cognitive processes and come to an agreement about what is to be done or changed,

articulated, and written down by the student in their words and understanding. Some supervisors might be too eliciting and, as international colleagues have phrased it, too polite to indicate to students that there are questions to answer, problems to deal with and actual work to do here. In trying to encourage students to express their ideas and develop their thinking, supervisors might use only supportive and eliciting prompts but, by not being clear, directive, informative and prescriptive at key moments, leave the students still confused about what is to be done next, and how their work is *progressing*. Looking through the range of dialogues presented below, and thinking about how you could improve on the interactions, using your own words, could be a first step in developing that range of discourse useful to manage the most important work we do as supervisors. You and your student will need to decide on the changing needs and level of involvement or direction, and the dialogues you use with your student will reflect this. They could move in a single supervision from eliciting and supporting the current work, being informative and directive about what needs to be done, the regulations, through to challenging and critically engaging, which leads to brainstorming, testing hypotheses against the evidence, risk-taking and conceptual threshold crossing – higher-level thinking and new ideas taken through into action. Our research findings might be of help here.

Study of developmental supervisory dialogues (Wisker, Robinson, Trafford, Warnes and Creighton, 2003) reveals that different kinds of interaction are necessary at different stages in a student's project, and at different stages in a single dialogue. Viewed holistically, dialogues often run through a variety of interactions, some informing, some eliciting. A variety of interactions is necessary for the development of the project discussion. It is very important that students are clearly aware of requirements, dates and rules, but it is also essential that, as largely independent learners, they are fully involved, creative partners in the inception, clarification, development and progression of the research, then of the interpretation of data and the drawing of conclusions. For ownership, responsibility and for the project to be the student's own, it could be preferable to have a high initial number of eliciting interactions, gradually evolving into the student taking control. However, sometimes it is necessary to challenge students in order to help them overcome sticky points, and to take learning leaps, and cross conceptual thresholds in their work.

Within single supervisions, supervisors and students can move through a variety of interaction categories and this could be seen as a repertoire.

▶ **Early conversations between supervisors and students**

Early supervisions have three aims:

- establishing supervisory relationships and learning conversations to better enable future interactions;
- focusing on students' development of the research proposal and conceptual frameworks to enable the development of an appropriate research design and scaffolding for their research;
- identifying skills and skills gaps in order to address these in future work on research methods and practices.

With research students, there is a range of strategies that enable students to engage more fully with their own research, including research developmental programmes and supervisory dialogues. Individual dialogues are clearly focused initially on research questions, identifying a conceptual framework, choosing and defending methodologies and methods, and secondly, on developing aspects of the proposal to be effective, cohesive and realistic. The dialogues encourage students to describe their question, concepts, theories and methods.

At the beginning of research, dialogues seek clarity in planning and processes while later supervisory dialogues pinpoint and ask for logical connections to be made and argued through, asking students to 'tell the story' of the research, and to develop and argue a visualisation of the research journey. Logic helps some students, for others, metaphors help. In practice, some of the phrases we tend to use in different dialogue categories might sound like the following, but you will need to identify your *own* voice and expressions when deciding how and when to interact in which categories:

Didactic
(teaches)

'The abstract should be only 500 words and you must ensure it is concise, clear, accessible to your examiners. Look at these models and try to produce a draft version following one of them.'

Prescriptive
(prescribes
a solution)

'No, don't cut the results part away from the discussion and interpretation. They need to be woven together.'

Informative

'It needs to be referenced – using the Harvard

(provides straightforward information about e.g., dates)	system.' 'Ramsden and Entwistle would be good researchers to follow up here.'
Confronting and challenging (used if there is a problem or issue which the student has not tackled after several suggestions from the supervisor)	'Really, how do you think you are going to access this sample?' 'You have not yet made a realistic suggestion – there could be problems – how will you tackle them?' 'The statistics so far just don't answer your question. You need to re-design the research for the next phase.' 'The results seem to suggest a contradiction to your hypothesis – what does that suggest for your theories and next steps?
Tension-relieving (often after a difficult exchange, at the start and finish of a supervision	'Oh no! Not more of those bar charts!' 'How are you fitting all these interviews into your busy holiday schedule?!' daughter well?!'
Encouraging and facilitating (developmental comments to move the student on)	'I see you have written about how Virginia Woolf engages with inner thoughts. Is this just a formal experiment in your view? Or is she saying something about self, experience, and the ways we perceive and express it?' 'You have shown how widening participation agendas appear in government documents and in university mission statements. Do you perceive any contradictions, paradoxes or prob lems with the equally popular comments about fee payments?'
Eliciting (this draws out further comments)	'If you wanted to observe the children, how might you do this without affecting their behaviour?' 'Could you just explore what these different interview categories suggest in terms of your argument about disclosure?' 'What could happen next?!'

Supporting
(these comments
support a good idea
by positive responses
and help nurture
a growing argument)

'This is an impressive participation rate.'
'The work is going well, you have
responded critically and evaluatively to
the results of your interviews and fed
these into changes in your proposal. Good!'

Summarising
(these comments help
mark a stage in the
development and
ownership of the
research. They pull
together and agree
on work so far)

'It seems you have found a range of
themes here and have analysed and
discussed them according to the cate
gories you have developed.' 'So, as you
argue, Lacan's mirror phase is chal
lenged from a feminist perspective by
Kristeva's essays as quoted in your
second chapter … .'

Clarifying
(these comments
support the student in
clarifying terms,
arguments, elements
of the design or
expression, etc.)

'Are you arguing, from your results in the
two classrooms you observed, that it
seems girls are more likely to tidy up
than boys? If so you probably need to …'
'I'm not sure what you are saying here
about the effectiveness of that
procedure on re-growing coral – could
you revisit the data and then explicitly
link it to your argument?' 'What do you
mean here by the term postcolonialism?
Is it (a) in opposition to the colonial, or
(b) *after* the colonial?'

Collegial exchange
(as colleagues and
equals, students and
supervisor discuss
reading, ideas,
research, differences,
agreements about
interpretations)

'This is a fascinating argument – have
you looked at the work of Lave and
Wenger on communities of practice?
because it's absolutely central to what
you are saying here.' 'There's a conference
on the Gothic coming up in Liverpool in the
summer – had you thought of giving a paper?'
'Yes, this is the same kind of result I came up
with after running the experiment 12
times – what did you do to get over that
problem about the water filter?'

These are examples of the various interactions, in practice, but they are in words that practising supervisors might use. You would need to find your own words to engage with each kind of interaction. Dialogues will also be affected by when they take place in the student's research journey. There might be informative, didactic, prescriptive interactions with undergraduates who are working in a very tight timeframe and are starting out in research. However, with students producing their first research work, dialogues also involve collegial interactions at the outset. When students face personal as well as other problems, they sometimes lose confidence and conceptual critical edge, and might therefore need more direction and guidance than previously. With students completing their work, some informative dialogues help manage the final processes, on time, and the challenging, critical dialogues help clarify the contribution to knowledge, while collegial ones suggest the ongoing engagement with research beyond the project.

It is also useful to ensure you provide a 'feedback sandwich' if your dialogue is largely feeding back on students' work. In this model, we make positive comments first, then move to the eliciting and the challenging, the suggestions that there are some areas which could be developed, clarified, improved, extended, etc. Student and supervisor can engage with these through eliciting and challenging, and questioning which expects one or more responses to be conceptual, problematising, practical, factual, clarifying, and extending. From the probing, challenging, clarifying, questioning and critical centre of a dialogue, both face-to-face and online or on paper, feedback then often moves to the directive comments if necessary, and finally closes with some positive comments rounding off the dialogue, reminding the student of what has been achieved, asking the student to reflect on that, and together deciding and settling on what the next piece of work will be.

Activity

Look back at the 11 interaction categories on p. 000 and consider:

- Do you feel comfortable using all of these?
- Which ones do you use more frequently? Where? How? Why? To what ends?
- Which ones are you less likely to use? Why? Could you use them? Where and why?

Supervisory dialogues towards completion

Learning conversations and supervisory dialogues towards the end of a post-graduate research project include dialogues clarifying the conceptual framework, contribution to knowledge and argument of the work, and mock vivas (see Chapter 21). Students indicate crucial change moments in the course of their research. In so doing, dialogue should enable them to reflect on the importance of development, on the significant changes they have made and how their learning and research fit into the overall critical framework of the research as a whole. Facing up to and identifying the effects of critical incidents moves learners on in their ownership of learning.

One way to approach dialogues towards completion is to ask the students to concentrate on 'telling the story', 'mapping the journey', and ensuring a clear conceptual framework running throughout. Students are encouraged to answer questions about their research question and aims; show how their conceptual framework develops from this; explain how their research methods have enabled them to action and direct their research; and demonstrate how their analyses, findings, and results grow from the question and methods. They describe the stages as a journey, with pitfalls and creative leaps, and moments when the research fell into place. They indicate any problems experienced (most often these turn out to be related to methods). They could include observation that did not enable them to pinpoint specific change moments, and questionnaires which asked the wrong questions and generated heaps of relatively useless information. They discuss moments when they learned to jettison much of the information, focus in tightly down onto what mattered, adding further methods and vehicles if necessary.

Students are also involved in peer-support dialogues with their colleagues, family and critical friends. They can work supportively, together shaping each other's research and providing peer feedback and support. These peer-support opportunities can point to invaluable learning conversations (see Chapter 10 on peer support).

Supervisory dialogues also offer feedback which supports and aid learning. Some of the dialogues will take place face-to-face and others in the actual text produced, online, at a distance. Looking at dialogues on written texts, Vijay Mellan and Elke Stracke (2007) analysed supervisor–student interactions where the comparable roles in HE of both made this more of a peer learning interaction. They found three main categories of feedback which variously guided, questioned or prescribed. There were referential, directive and expressive categories, and they analysed the language used in each into comments about the text in the range: Editorial, Organization, Content, Directive Suggestion, Question, Instruction, Expressive Praise, Criticism, and Opinion. We look at feedback also in Chapter 9 (00), and it is

worthwhile thinking of feedback as a dialogue between supervisor, student and the work – in this case, written work and a written dialogue. For this supervisor/supervisee pair, the interactions were a dynamic learning experience: 'The supervisor's invitations to reconsider, view his work from a different perspective, maybe change things, maybe stick to what he thought was the right thing to write, had another important influence on the supervisee. Not only were the expressive comments useful to him in developing his argument and presenting his research, but they also gave him confidence. To the supervisee, engaging in an analysis of written feedback on a PhD thesis dialogue, by means of addressing the feedback, assisted his learning' (pp. 467–8). Additionally, written feedback played 'an induction role into the academic discourse community as well' (Hyatt, 2005 p. 351).

Supervisory dialogues are the major way supervisors work with students to support their development. The process seems to resemble a dance, building different dialogues at different stages in the students' work, getting inside how their question, conceptual framework and methods accumulate together in order to work *with* them to plan, action, reflect, evaluate, achieve and write up their research. If the supervisor 'takes over', students might not *own* or understand the research; if supervisors elicit excessively, they might feel confused, unclear and not directed. In our research at Anglia Ruskin University with PhD students (Wisker, Robinson, Trafford, Warnes and Creighton, 2003), and latterly for myself at the University of Brighton, we have noticed our styles becoming more flexible to match specific development, individual learning, and needs. It might be useful to consider the kinds of dialogues and interactions which suit *you* in your role as a supervisor with *your* student and which can empower the student's development as a researcher, enable the articulation of good quality research, and equally provide creative developmental work in and through that dialogue, for your own benefit as a supervisor and researcher.

► **Further reading**

Heron, J. (1975) *Six Category Intervention Analysis* (London: Tavistock Institute).

Love, A. and Street, A. (1998) 'Supervision as collaborative problem-solving: an integrative approach to postgraduate research education', in Kiley, M. and Mullins, G. (eds), *Quality in Postgraduate Research: Managing the New Agenda* (University of Adelaide: Advisory Centre for University Education).

Mellan, V. and Stracke, E. (2007) 'An analysis of written feedback on a PhD thesis', *Teaching in Higher Education*, 12(4), (August 2007), 461–70.

Phillips, E. and Pugh, D. S. (1994, 2000) *How to Get a PhD: A Handbook for*

Students and Their Supervisors, 2nd edn (Buckingham: Open University Press).

Wisker, G. (1999) 'Learning Conceptions and Strategies of Postgraduate Students (Israeli PhD Students) and Some Steps towards Encouraging and Enabling Their Learning', paper presented to the 2nd Postgraduate Experience Conference: Developing Research Capacity in the New South Africa, Conference Proceedings, Cape Town, South Africa.

Wisker, G., Robinson, G., Trafford, V., Warnes, M. and Creighton, E. (2003) 'From Supervisory Dialogues to Successful PhDs: Strategies Supporting and Enabling the Learning Conversations of Staff and Students at Postgraduate Level', *Teaching in Higher Education*, 8(3), 383–97.

9 Encouraging good writing

Learning how to develop an argument throughout a dissertation or thesis, and then journal articles and books, and how to ensure an argument is organised, well expressed, informed by theory and backed up by appropriate evidence, is crucial for all researchers. Let us look at ways in which we might support students in developing their writing skills through encouraging critical thinking, argument, writing strategies, clear expression, the development of their own voice, and engagement with and in the discourses of their subject(s).

This chapter considers:

- *the importance of critical thinking in writing*
- *what constitutes good writing*
- *getting on and keeping going – supporting student writing*
- *overcoming writing blocks and getting through 'stuck' places*
- *writing exercises*

Some people 'write like a dream', seemingly effortlessly structuring sound arguments, leading the reader from a carefully posed question or hypothesis statement through the exploration of debates in theories with experts in the field and developing a dialogue with them. They move on through clarification and argument of why specific theorists and arguments relate to their own developing work, frame it and drive it. They present contrasting arguments, linking these with their own original contribution, moving on into clearly explained and defended methodology and methods – saying why they did not choose another methodology or methods, through to a discussion of the data, theorising it with those same theorists established in the literature review, explaining analysis processes and then interpreting data and drawing findings from it. They develop totally appropriate thematic

203

comments arising from theory underpinning the questions they asked and the data produced, weaving argument and analysis in with the information, using data selectively, whether tabulated or in quotation from, for example, poets or interviewees (as appropriate to the discipline). If their work is scientific they outline and contextualise the data they have selected to explain and evidence their work, then they discuss it and theorise at that point. If their work involves an art product, they theorise, explain, discuss and link the communication about how the art was produced and why, what question it addresses and how it does so, and they also have the artwork, CD-ROM, dance, piece of weaving, video, or other product accompanying the dissertation or thesis as the product of their research. Their writing moves fluidly on to clear, logical, elegantly expressed discussion and development of both factual and conceptual findings. Their factual findings both evidence and explain what has been discovered. The themes are present; the arguments exist. Their conceptual findings lead on from the research, contributing meaning, enhancing understanding, clarifying concepts and theories and taking them further. They explain that this suggests that, this contradicts that, this poses further questions, and we need to rethink our focus on this and that. And, elegantly again, the abstract (usually finalised last) indicates the area of research and its questions, why they matter, the theories involved, the ways in which the absolutely appropriate use of theory articulated in action through the right methodology and methods have shown this, argued this, and contributed that.

I have just led you through the format of a well expressed, elegant thesis (I hope). Not everyone, however, is effortlessly perfect in their writing! Writing well or well enough is often very hard work, the result of drafting, re-drafting, editing and re-editing to finally make the words clearly express the arguments and ideas. Many, in fact most, writers get stuck at some point, lose confidence, need to rewrite and could benefit from some helpful comments from other critical friends and readers to refine their work.

▶ **Further encouraging students to write**

Students often feel they have nothing to write about until they have finished their reading or research. This is dangerous nonsense! They might not be contributing stunningly original ideas yet, but the sooner they begin to write, the more they will be able to reflect, alter, develop, jettison, add and hone what they have. Getting their ideas and arguments down on paper helps *form* those ideas and arguments. Supervisors in our research on doctoral learning journeys (Wisker, Morris, Cheng, Masika, Warnes, Lilly, Trafford and

Robinson, 2010) and academic writers in our work on breaking writing blocks (Wisker and Savin-Baden, 2009) indicate the importance of writing ideas through in order to clarify them, and to see what you do or not yet understand. Writing helps you clarify your thoughts, and engage with the discourse of the discipline in practice (Wisker and Savin-Baden, 2009, pp. 235–347). All the literature on thesis or dissertation writing indicates that students need to be encouraged to start writing early and to learn the conventions of their disciplines in terms of how they write, what they write, the language they use and even the shape of the thesis or dissertation (Dunleavy, 2003; Murray, 2002). In the EdD or PrD and in some MAs, development is structured naturally and incrementally around a number of writing tasks building up into the final thesis or report. In PhDs, students are often expected to produce work in progress for confirmation of candidature, which encourages them to write a well-structured and clearly organised and expressed piece. They are also expected to produce draft chapters for their supervisor.

Some researchers take a naturalistic approach, indicating that students construct themselves within the discipline. Murray (2002, p. 12) concurs, adding that each subject area represents a distinct 'discourse community'. Each thesis or dissertation sits not just within the distinct discourse community of the discipline but, also, within a smaller, no less complex, sub-set of that disciplinary discourse, their specialist area.

Many students undertaking master's and PhDs are combining across discipline discourses. Often postgraduate study is multidisciplinary or interdisciplinary and in that resides some of the originality. Students need to learn their way into the epistemology and discourse of their version of the discipline(s) in which their work sits. They also need to learn the meta-discourse of research and thesis writing itself; discourse foregrounding the journey of the research; the structural principles upon which it and the final thesis are based; conceptual frameworks; mapping; 'design of the study'; theoretical perspectives; and choices and defences of decisions made during the research, with explanations of the writer's own context and that of the topic. These areas of writing explain choices and directions. They also explain decisions on methods and structure. They learn: to write discipline and (if appropriate) interdiscipline discourse and research discourse; the different ways in which you write in different parts of the dissertation or thesis: informative or descriptive; how to theorise in a dialogue with the work of others; how to develop an argument; to use information and data in an interpretative framework; and to step back and conceptualise, clarifying the contribution to meaning and the field.

In educational and social science research, students weave their way

through a variety of established terms by which they can identify their methodology and methods. These include: inductive and deductive, triangulation, validity, and reliability. Specific terms frame and focus the work, yet they are unlikely to be words used by either a scientist or a literature researcher. For the scientist, the detailing and, where appropriate, defence of the methods, and the exploration and explanation of the results, are the main form of writing, where this latter interpretation will be informed by theorising. For the literature student, the actual process of research, the critical practice and the framing of questions, methods and decisions made about the approach are quite likely to be taken for granted (unless the student is carrying out archival research or interviews which will need more explanation and defence methodologically), and are certainly not foregrounded in a meta-language. In literary studies and performance arts, students might claim they have no need to be as 'jargon ridden' as their social science colleagues, but in fact they, too, ask research questions, develop theoretical perspectives, research designs, methods and conceptual frameworks, and need to make these evident to a reader to situate research arguments, ensuring that they focus and clarify the critical approaches taken. Perhaps the skeleton supporting the research, the methods, will be less of a topic, but some revelation of choices, approaches and conceptual frameworks actually helps to establish the direction, shape and significance of the research and its expression in all dissertations or theses and so should be encouraged.

Some students from the sciences and humanities find the social science focus of research development programmes irritating and irrelevant. They also do not find that the shape of their thesis or dissertation is discussed in the writing support sessions. While we all probably supervise in our own disciplinary silos, making the inexplicit explicit often helps us and our students realise the purpose of the shape of the written piece. It will be very like the journal articles we and the students write, which also differ in different disciplines. Clarifying the expectations of the shape of the dissertation/thesis, and the reasons for the different parts of it and different forms of writing within these parts, is helpful. Discussion between supervisors and students from different disciplines about the differing shapes, reasons for them, and language in which to express the research can also be useful when well managed, explaining that it is not a competition, it is a set of varied orthodoxies. This can help us all clarify the purpose of the engagement with the literature and theory; the defence and clarification of the methodology and methods; and the need to develop a theorised argument throughout, coupling evidence and claim, and theory and evidence/practice as appropriate. Working with an English PhD group, I have found both an

initial resistance to generic research development training because of this focus on meta-language, and an eventual acceptance that a discipline-specific interpretation and utilisation of what it seeks to structure, discover and express can be developed. Sessions on defining research questions, on conceptual frameworks and on working towards the defence in a viva have worked well with this subject-specific group because they *can* interpret these terms as stages in their own work. For social scientists, it is rather like the Pompidou Centre in Paris: the pipes and workings are on the outside, visibly expressed from the start. Literature, performance and some humanities students need to make the implicit somewhat explicit, and to be encouraged to identify their conceptual and theoretical underpinning and the appropri-ateness of the methods they have chosen. Otherwise, they might be neither conscious of these aspects of their work and how they could use them again, nor able to articulate this in a viva.

▶ **The well-written dissertation or thesis**

The really elegant, well-structured thesis or dissertation argues a well-substan-tiated case throughout, and gives a sense of the coherence of the whole conceptual framework in action, as explored, with each paragraph and chapter indicating where the argument is going and where it has been. It interweaves the themes and underpinning concepts, theories and questions throughout, so that in the end there is a beautifully crafted, elegant piece, its arguments and themes running throughout like threads in a piece of weaving, motifs in a poem, or a piece of music. Additionally, it feels engaged and somewhat personal. It takes the reader on a journey of discovery. This might be a coher-ent and well-woven piece, but on reading it you also have the sense that there were decisions made, problems met and addressed if not overcome. Some things worked better than others, some things could not be discovered, while new revelations appeared as a result of the research itself. The research might have set out like a bit of a route map, a planned set of trips with dates, times and a journey foreseen, but in reading it and, if there is a viva, hearing it, we can see that actually it was vibrant, alive to discovery and danger. The finished piece reflects the corners turned, the journey, the explored nooks and crannies and whole vistas revealed (see Chapter 18).

This and the introductory paragraph are exuberant celebrations of an ideal thesis or dissertation. But not all of our students and not all of us (I would dare to say) do write 'like a dream', and, indeed, like good craftsfolk, even those who produce such fine work have had to craft, shape, mould and edit, edit, edit until the finished product emerges. For many, it is quite a difficult task to turn

the gradually clearing ideas into questions, to engage in a dialogue with those experts whose work seems to have said it all, when it would appear more deferential to that work to summarise it and move on. It is a challenging task to identify the arguments between experts and theorists, to analyse, contrast, debate and *add* to what they say in terms of your own work, so constructing and contributing to understanding and knowledge

▶ Notes, logs and journals

Keeping good notes is an important step in good writing. Referencing them well saves time searching at the end (see Chapter 6). Good notes should be focused on the subject, the topic, field notes from experiments and research activities, and notes on texts. These need to be augmented by notes about methods and methodology, and contextual underpinning. Students will then be able to explore and explain why and how they went about their research. If they have not kept notes of the 'nuts and bolts' of research, the twists and turns which have revealed surprises, and sometimes led to real challenges, their reflection and evaluation will be more difficult. The twistings and turnings of the research can be recorded in a log or journal. These feed into parts of chapters exploring why and how research decisions are made and are also useful to review when preparing for the viva (and after graduation, for employment) where your students will surely be asked if they had any surprises in their research journey, found anything unexpected, and why they made the decisions about methodology, methods, analysis, and interpretation that they did. The activity of taking and reflecting on challenges, disasters, revelations and decisions can also prove useful if students lose their way, or have a writing block. Writing notes about thoughts, problems and decisions can generate writing energy, contributing to the writing of the thesis/dissertation itself. It is actually such a long slog doing a dissertation or thesis that the accumulation of information and quoting and detailing of what has been found can take over from putting it into perspective and extracting from it to illustrate a point and develop an argument. This set of ideas and evaluations could be used as a blueprint for action – something to head towards as well as, later, to reflect back on and see where the research and the writing developed.

▶ Activities with students

Even eloquent and intellectually lively, rigorous, alert students can benefit

from looking at a well-organised dissertation or a particularly well-argued paragraph or journal article as a model. To this effect, on the research development programme for the Open University EdD, students and supervisors alike explore the construction and expression of literature 'reviews' (see Chapter 7). The session begins by analysing journal articles and moves on to define good practice, providing examples in action of carrying out work on literature reviews. On the postgraduate programme for International PhDs at Anglia Ruskin University, we conduct a similar exercise, additionally asking students to look closely at paragraphs in journal articles, considering where the links and arguments are, so they identify *when* a question moves clearly to an exploration and critical examination of experts and data, leading to conceptual as well as factual findings in an argument. We look at published papers at the level of the sentence and paragraph, as well as at the level of the paper as a whole. Analysis of published writing forms points for group discussion and individual reflection, and then feeds into individual writing tasks.

On Anglia Ruskin University's MA in Women's Studies, in the fourth, research-orientated module, students were encouraged to carry out three assessed writing tasks building on generic research strategies. On two Saturdays, all MA students worked together on generic strategies, such as turning topics into questions and developing conceptual frameworks. Taught sessions followed, focusing on research strategies – interpreting the generic in a discipline-specific way. In this case, it means feminist research practices, which tend to be collaborative, non-invasive, often personalised in terms of language as well as focus, and ideologically driven and structured. Arguments underpinned by feminist criticism and critical apparatus are translated into the inter- or multidisciplinary focus of the research and students must learn a variety of discourses in which to express their research. Students learned to continue the variety of research methods, discourses and the meta language of research itself.

Specific sessions focused on research in progress. Everyone defined questions, clarified conceptual frameworks, and explored which theorists to use and how, which methodologies would enable them to ask their questions, what kind of data analysis they needed to use, and how to categorise, analyse and express arguments. Explaining to others gets the thoughts out into language. Writing it down *before* and altering *afterwards* helps the writing process.

The first piece of work was an annotated bibliography requiring students to select ten key texts they would be using and to explore them in a dialogue both with other specialists in the field(s) and, importantly, with their own intended work, so they could see and show how and where they would

engage with these writers. Of course, other writers and theorists emerge during the course of the research and writing, but this begins the practice of getting into a dialogue with experts, in relation to their own work. The second piece was a critical analysis or evaluative commentary on a key text, exploring the establishment of a question, an argument, theories and methods. Students went on to explain and explore how their *own* work would engage with this in dialogue. This gave them the opportunity to explore and express the shape of a piece of research and argument, see it from the inside, turn it inside out, and judge its coherence so it could become a model (if it is a good piece). Additionally, they could critique, engaging thoroughly in an argument with the work. The final assessment hurdle was the research proposal. Each session and assessment involved work in progress. As supervisors, we can scrutinise their writing and they can share ideas and writing with others. They have to write what is actually going to be part of the dissertation in the end. This is a useful way to break writer's block and a good starting point for writing some early sections.

Another writing task on this PhD programme asks students to briefly attempt a first stab at an abstract. Of course, it is too early to do this even in the third stage of the programme because they haven't finished the work, but trying out the specific language of an abstract by examining several abstracts and analysing models is good practice. It is particularly useful for those who find it difficult answering questions about the point and aim of the work, the conceptual as well as the factual areas under question, the design and reason for it, and the conceptual as well as factual findings. The abstract enables them to start working in that meta language, and to stand back and look at their work at a time when they might be overwhelmed with the size and enormity of the task. They answer relatively straightforward questions, getting the abstract in perspective, then writing down what they have said aloud and working on it. Often, the exercise involves them changing what they write into the third person passive rather than the first person and helps them avoid providing a chapter summary (which some students might think is the function of the abstract).

▶ Two main issues about good writing

There are two main issues students need to consider about good writing: taking a critical stance and arguing; and expressing themselves in a coherent and interesting manner. The first is about the level of thinking and conceptu-alising – being able to imagine, stand back, see the whole picture and ask questions of it all the time, develop arguments about it, then show how what

has been discovered engages with, relates to, and puts these arguments into action. This level of work can be informed by research into student learning. The work of Morris and Meyer (2003) concentrates on exploring threshold concepts – key conceptual ways of looking at a subject that mark a transition in student learning from what could be descriptive to what gets hold of the central problems and ways of looking at the world. Without moments where thresholds are crossed into conceptualising, students might well be stuck at the level of description, however elegantly expressed. Margaret Kiley and myself (2010) with others in different contexts have translated this into explorations of the processes of learning evident in and encouraged in doctoral students. Asking critical questions that engage students in identifying concepts, of which detail and data are evidence in action, can help students to work at a higher level than the merely detailed and descriptive. Students need to be encouraged to work at high conceptual and critical levels. This we can help them do with exercises and questions prompting thought translated into writing.

Another major issue is that of expression – the right words in the right place, linked into a coherent whole. This involves being aware of how to develop links between the parts of work as a whole, and between chapters, paragraphs and sentences. It involves being able to use linking phrases, to ensure themes are interwoven, that theorists and arguments are picked up and used throughout, and referring backwards and forwards to make it a coherent whole, using phrases such as 'in this respect', 'additionally', 'while it has been argued that this evidence/work, suggests …', etc.

Supervisors need to ensure students have developed and can use both of these kinds of writing – the conceptual and critically engaged, and the coherently expressed. It is particularly difficult if students come from a different language culture and might be able to express themselves elegantly in their own language but less so, they feel, in English. It is particularly difficult if we are working with drafts sent through the post or email – because we are tempted, perhaps, to fall into the trap of correcting all the errors of expression and syntax (important because they enable or prevent the argument being expressed) at the expense of encouraging critical thinking and a critical, conceptual, analytical approach.

It could be useful for you to work with your student and identify problems with others' writing, as well as identifying successful strategies for writing conceptually, critically, eloquently and coherently. This can be done through close analysis and critique of any journal article, book, chapter or thesis/dissertation. Choosing or writing some examples from your own subject to work on with your students will enable a focus on what constitutes good writing or good enough writing at the conceptual/critical level

and the level of expression. Negotiating agreed responses to extracts helps pave the way for feedback on students' writing.

▶ **Reading, thinking and asking questions**

One way of encouraging critical and conceptual work that is analytical rather than descriptive and factual is to set up good reading practices and supervisor–student interactions that draw on these to develop thinking and writing. Delamont et al. (1997) mention three kinds of reading needed for carrying out research. We can develop their suggestions, indicating the levels of response and conceptualisation that students employ in their work. 'For arts and social science students there are three types of reading to be done: reading on the topic, contrastive reading and analytical reading' (1997, p. 57). They offer worked examples of three kinds of reading. Student *thinking* also needs to be at three levels: the descriptive, which sets the scene and identifies evidence; the conceptual and critical, which engages with theories and critiques argument; and the analytical, which explores and clarifies, unpicks arguments, relates evidence to claims, and builds a well-argued case backed up by careful analysis of findings. Giving selective feedback should better enable engagement at the more than descriptive but also conceptual, critical and analytical levels. Consider some of the stages of students' writing and kinds of writing needed. You might take students through the examples given below or other pieces from your own discipline – asking critical, prompt questions – helping students to develop conceptually, critically and expressively. Developmental feedback could ask students to turn topics into questions, to be critical, analytical and to theorise.

We will look at an example of how (i) a topic area is developed into a question, which in turn prompts (ii) thoughts about reading to be undertaken, and then (iii) the beginning of conceptualising rather than describing and detailing.

Example
Topic area: skateboarding and youth
Title: A study of skateboarding as a radical youth activity in New York

Research question

- In what ways does skateboarding operate as a radical activity and expression for youth in New York?

Sub-questions:

• What are the instances of skateboarding in New York, and internationally?
• In what ways is it a radical youth activity?
• How does it enable youth to express freedom, individuality and energy?
• How does it reconfigure and re-express the cityscape?

Theory
To ask this question and sub-questions in terms of my reading and theorists,
I will need to use and explore a variety of areas including:

• Youth movements – a range of activities, including clubbing, drug use,
  specifically sports and radical or extreme sporting activities (e.g. wind-
  surfing, surfing, BMX bike riding, snowboarding).
• Geographies of urban environments and interpretations of these geogra-
  phies – town planners' views, alternative other views, e.g. 'take back the
  night' women's marches, and views on the safety of urban spaces and
  their meanings.

A descriptive piece
Working at a merely descriptive and factual level, a student might produce
the following:

> Skateboarding has grown as an activity in our cities, and skateboarders
> can be found in most major cites, including London and New York. It is
> estimated that there are 100,000 skateboarders internationally. They are
> noticeable because of their seemingly dangerous active use of the various
> parts of the city which other people are working or living in.
> Skateboarding is a sport which involves young people in the main,
> although some of the great boarders, such as Tony Hawkes (on whom
> computer games have been based), are well over 30.

A conceptual piece
Working at a more conceptual, analytical, critical level, a student might
produce the following:

> Many of us have nearly been knocked over by a self-absorbed individual
> on a skateboard thoughtlessly crashing down the steps at the library or
> swimming pool, racing along pavements and mindlessly leaping benches,
> steps and railings. However, skateboarding is more than merely an irritat-

ing intrusion on the daily lives of ordinary people working in and using a city. It represents both an example of a radical youth activity and one which reinterprets city spaces to reclaim them for young people. Skateboarding has grown as an activity in our cities, and skateboarders can be found in most major cities, including London and New York. It is estimated that there are 100,000 skateboarders internationally. Skateboarding as a sport involves young people in the main, although some of the great boarders, such as Tony Hawkes, are well over 30, and the popularity of skateboarding has turned it into something of a youth cult movement with all the trappings of its own language (ollie, kick flip) and own international communities which others can enter upon indicating their status as boarders. It has also produced videos and other marketable items including videogames. Skateboarding represents an element of a youth counter culture ...'

Giving feedback to encourage the improvement of critical thinking to underpin good writing
Comments on the first short piece might include:

> Skateboarding has grown as an activity in our cities, and skateboarders can be found in most major cities, including London and New York. It is estimated that there are 100,000 skateboarders internationally.

> *This is an interesting and informative piece about the worldwide urban existence of skateboarding. What might its popularity suggest about this as a youth movement or cult activity?*

> They are noticeable because of their seemingly dangerous active use of the various parts of the city which other people are working or living in.

> *Yes indeed, we see and try to avoid them daily! Is this dangerous active use of the city just selfishness or does it suggest any other interpretation or ownership of the city? Does it 'stand for' or 'represent' anything?*

> Skateboarding is a sport which involves young people in the main, although some of the great boarders, such as Tony Hawkes (on whom computer games have been based), are well over 30.

> *This is seen as very popular – more than just a youth activity then? What might the implications of the involvement of older boarders be? What might the production of computer games indicate not only about the popularity but cultural significance and impact of skateboarding?*

The reason for this kind of questioning feedback is to encourage critical, conceptual and analytical thinking. Giving students an example of such feedback should help them to problematise and conceptualise. Asking them to work together or individually on 'marking' journal or local newspaper articles on a related topic might encourage critical and conceptual thinking in their own work. Students might be asked to provide feedback to improve the *second* piece on skateboarding.

The next part of the exercise involves students auditing and editing a piece of their *own* work, marking it up and giving themselves such feedback as above, then improving on the work accordingly.

There are many books on academic writing that can aid students in expressing their ideas succinctly and elegantly. They should be advised to consult these when producing early drafts and particularly when writing up final drafts and editing. For international students, the issue of tertiary literacy is explored further in Chapter 12, but contributes considerably to their experience of translating into acceptable subject and research discourse the critical arguments they wish to make. Their language facility might hamper these arguments. See Chapter 18 for a discussion of coherence on the finally submitted dissertation or thesis.

▶ Encouraging critical and creative thinking to improve writing

It is important to set up working situations in which creative thinking and expression are released, in which students can approach issues and ideas in a number of ways – some imaginative, some more systematic, planned and finished – and then work to incorporate them into an organised, analytical answer, whether written or spoken. Harnessing a diversity of thoughts, experiences and responses and helping to shape them are enabling processes.

Feedback on drafts

Feedback to encourage writing that is critically informed, well argued and well expressed is essential for the development of a good thesis or dissertation. When students are given feedback on drafts of their work, any miscommunication could result, for them, in confusion about direction, leading to extra unnecessary work or writer's block. Students have commented on confusion at what seem to be cryptic or shorthand comments, for example:

- 'Please clarify'
- 'This might not add up'

comments that suggest further work or reading, but don't indicate how much:

- 'More was needed here'
- 'Have you looked at Deleuze and Foucault?'

or which seem to contain veiled threats of failure:

- 'Conceptually weak'
- 'No!'
- 'You will need to really pull this together before sending it to me'
- 'Too many errors of expression here'

and even those that generally suggest a satisfied response:

- 'Lots of interesting work here'
- 'Yes!'

If any of these rather vague 'phatic' comments are used, they need to be backed up with clarification and specific advice, including examples of good expression. For all students, and perhaps most specifically for those from culturally different backgrounds, clarity of guidance is essential both in the very early stages and as the student writes up first and final drafts.

Colleagues with whom I have worked have indicated their strategies supporting good writing. Some encourage students to write early drafts so they can share discussions about critical and conceptual levels, involving reading and theorists in a dialogue with the students' own work rather than merely summarising. This helps students develop a style of their own, suitable for the level of the work. Some activities encourage the use of the meta-language of the subject, and others of their own voice.

Rowena Murray (2002), concerned about explicit guidelines from the student's point of view, asks about feedback:

> Are the comments global or detailed or both? For supervisors, there is a decision to make about what type of feedback to give. Do they want to make you focus on the 'big picture' of your whole argument, or a section of it? Or do they want you to tidy up the style? Is clarification of terms paramount? Given that these are all quite different questions, requiring different focus and action, the supervisors may recognize that one is more important, at this stage, than the others. For example, they may decide that the priority is to get you to define and use key terms with more clarity.

> There may be other aspects related to clarity that they want you to work
> on and this would make for an effective theme in their feedback. You may
> have been expecting more feedback on what you think of as the 'content',
> but they see the use of terms – and assessing whether or not you can use
> them properly – as a priority. You can regard this as a tension between
> what you expect and what you get. Or you can accept that you have work
> to do – and who would not have – in clarifying what you have written.
> (Murray, 2002, p. 78)

Selective feedback and hierarchies of feedback enable students to focus on
some issues at a time. Often it is a good idea to write specific suggestions in
margins, providing models of argument or expression that you feel are
necessary, or as extracts for students to analyse and consider, alone or as
part of a supervision. Both students and supervisors indicate the real useful-
ness of seeing *models* of writing required. This can be provided at the level of
paragraph or abstract, extract, or the whole thesis or dissertation. Preferably,
at least two examples for comparison should be provided so students don't
rigidly follow one model. When they have produced short examples of
writing, you could work very closely on providing feedback on a single para-
graph of their work in terms of expression, grammar and punctuation, and
asking them to take the changes in the text through the whole chapter then
return it to you for further assessment. This means you have indicated and
exemplified the kind of changes needed to improve the writing, but have
avoided doing all the writing for them.

Writing blocks

When I run writing courses I am always surprised that people treat writing
blocks and stuck places as grim little secrets, as if they were alone in this.
Recent research which I and a colleague, Maggi Savin-Baden (2009),
conducted revealed the commonality of experiencing and overcoming 'stuck'
places in writing among academics who write and postgraduates who write.
It is common, it is normal, and there are ways through being stuck which will
work for some people and other ways which will work for others. Those who
publish in these areas, such as Elbow, Boice and Murray, acknowledge the
problems and have suggestions for overcoming them. Maggi and I have
some solutions, too, and I have gathered more since we published by sharing
the experience with supervisors, postgraduates and writing groups. Places at
which your postgraduate student might get stuck vary from proposal and
question writing right on to correction, so it is not something to be over-
looked, and the experience of getting stuck is humiliating and frightening – a
kind of paralysis and crisis in confidence. The link between ontology – being

in the world, identity, self – and epistemology: knowledge creation, is very
clear here since the stuckness affects both the sense of self and self-worth,
and the ability to engage with complex ideas and articulate them in practice
and also interpret and articulate that.

Activities

Reduce the pressure by asking students to think about their voice and
their reader – their reader is themselves, their peers, their supervisor and
experts, and the examiners. These people have specific needs and respect
detail and clarity of argument. Together consider the expectations of the
dissertation, thesis or journal articles and identify what is achieved in the
average, expected shape and length.

   An exercise you can run with students involves reader reflection and
action.

You are your first reader

One of the main readers is you. How can you:

- Express your ideas and arguments clearly to yourself?
- Make the annotations on the notes you take and the data you collect •
  clear and engaged with the research question, so that you can turn
  these into analytical comments as time goes on?
- Carefully focus on getting exactly the right words and phrases to
  comment on what you have found and what it means, how it
  contributes to your knowledge and Understanding of the field?
- Write clearly, straightforwardly, using everyday language, the
  language of the subject area and the language of argument, where
  appropriate?

Some of the findings of our research have identified potential problematic
writing habits which can be shaped into positive movements forward. These
include:

- *Busy work:* which substitutes for conceptual, focused ideas and comple-
  tion *and* provides necessary stages and momentum.
- *Reading to write:* using reading to underpin writing, and the importance
  of articulation in 'writing through' and finishing.
- *Mimicry:* involving forms of expression initially lacking the writer's
  understanding or ownership.

However, we also discovered multitasking – doing several things at once or close to each other, and several forms of writing close to each other. Busy work can substitute for serious research and well-formed writing, so students feel they have been doing a lot but actually they have been journal-searching online, photocopying, annotating, and cataloguing. These are also essential elements of the research journey, but if they substitute entirely for well expressed writing, the work could remain at the informative, descriptive stage. If they are used in conjunction with that writing, then they feed into it, as well as giving the student some time away from conceptualisation and the honing of elegant expression, and they can move between the busy work and the writing, recognising it uses different energies and language.

We identified 'writing to write' as a way forward:

> One student said: *'… you can't see how you are going to get out of this, you know you maybe need to write your way out of it or whatever, so that is to do with getting stuck I suppose.'*

In my own research with supervisors (Wisker and Savon-Baden, 2009) they recognise that when students get stuck or when they begin to think about an area, asking them to read their way into the publications of the theorists and critics, the fundamental experts who established the ideas and did the original theorising and work, and those who are now dealing with and using their ideas in their own work and taking it all forward, using the language of dialogue and argument, can promote clarity of thought, new thoughts, and 'aha' moments when things start to come together.

Writing reflectively
Students will also find it useful to write reflectively, keeping a note of decisions made, problems faced, thoughts about what they are discovering, and about their research journey more generally. This kind of reflection is useful for considered thought and for writing and discussing both about choices made and about interpretations and findings. Reflective writing helps you to become aware of your thinking processes, and to be more critical and articulate. Reflective writing is also good for the process of keeping up the momentum, especially if your work is stuck, confusing or slowing down. Reflect on what you are doing and learning, what is clear, what is confusing, and what to do next. Reflect during and after activities, asking yourself of each problem, question, activity or finding:

- What does it mean?
- What does it contribute to my argument?
- What should I do next?

An example of reflective writing – my own:

> *I was rather stuck and bored with my writing for a couple of days – there seemed too much to do so I decided to focus on one piece at a time. I have just been correcting a chapter for two hours. I think it reads more clearly because: I moved the text around to make it more logical and to develop ideas; I decided it did not need to sound as intellectual and complicated as a published journal article so I toned some of the language down and concentrated on being clear; now it is more finished I can move on! Good!*

Discussion: I expressed feelings, summed up a problem, stated what I did, analysed it and reflected on how effective it was and why I thought it was effective, and then congratulated myself a bit. This piece of reflective writing was descriptive, personal, analytical and reflective, and producing it was actually helpful to my own writing processes. I can look back on it later when I get bored or stuck again, and I can ensure I am never complacent about writing, even when I produce something which is finished and acceptable. Reflective writing is 'writing to write', helps the flow begin and it is also a way of opening up the thought patterns so that the writing can continue. Latterly, the reflective writing about being stuck, finding new ideas, engaging with reading, making choices about methods and interpretation, and so on feed into your students' understanding of the research process. When PhD students have a viva they can recall why they made the decisions about actions and why they rejected other decisions – questions which examiners tend to ask so that they can hear the problematising and the research journey in action.

Did thinking about these help you to:

- Clarify your own reading?
- Clarify your ideas?
- Take stock of your writing processes and practices, the problems and the successful strategies?

Can you use what you have just written to move forward in your own writing and, if so, how?

Here it is useful to ask students to reflect and write about their experience in working with the previous exercises, then to plan ahead for further writing.

It could be useful to suggest to your students:

- Draw up a brief 'to do' plan.
- Write it out soon and re-do it regularly.

Writing out ideas and arguments often helps to crystallise them, so don't leave all your writing up until the end of the research, and do not worry if your first attempts at writing are messy, unclear and inelegant. The clue is to write, reflect, work it out on paper, and then polish it up later so it clearly expresses what you want to say.

I've found being honest about my own writing processes and blocks connects with and so helps others to develop awareness of and confidence in their own practices and then share these with other writers.

What follows is a series of thoughts and examples of ways to break blocks and move beyond stuck moments, which might be of use to your student.

Seizing the moment, and working hard on the writing

Occasionally, all the words I need to express myself come to me clearly, elegantly and in the right order and I rush to write them down. Sometimes this happens before I go to sleep and if I don't write them down I can't sleep. Sometimes it happens while I am driving, in a meeting or reading something else. The safe thing to do is to stop, make a note and return to it later.

This also happens to me with solutions to problems, whether the language is clear or not. My advice is:

Capture it, store it, work on it later.

However, this super elegant expression is so rare that it is worth mentioning. Usually the ideas come in messy forms and I clarify what I want to say by:

- starting to write, even just notes or bullets, or the odd poorly expressed phrase with mostly the wrong words;
- writing it out, however inelegant, imprecise and lumpy the wording is, and then looking back over it very carefully and trying to make what I say:
    - clearer
    - more elegantly and appropriately expressed
    - better punctuated and spelled
    - referenced to and referencing the work of others whose ideas and arguments have underpinned my own.

Overcoming writing blocks

But often we get stuck when trying to write. One of the ways of making writing a habit that you enjoy, even if it is quite hard work, occasionally frustrating, and ultimately rewarding, is to get into the habit of writing in different

ways regularly. If you do this, when you hit a block, you can remember the different ways you became unblocked and try each of these out.

Pick something you have to write. Start writing in the middle of a paragraph, a chapter or an argument. Just begin where you feel comfortable to write. Then step back, look at what you have written and produce a brief diagram of where it could all fit in your own piece of writing, as a paragraph or few sentences or a chapter, so you can add it in when you have written other parts. This is a way of working which is like a patchwork – a piece at a time. Remember to tell yourself it is only a draft so it can be improved! Write fast, as it comes to you, and then return to edit for:

- Conceptual level – ideas, theories, themes, as well as concepts.
- Expression – does it say what you want it to? Clarify your expression, deal with grammar and punctuation, unclear words and expressions.

- 'Free-writing' – (Elbow, 1973) to loosen up your thought processes and creativity. This involves writing for five minutes without stopping, on any topic. Once you are freed up you can turn to other writing.

- 'Splurge' – I write on and around the topic fast (and inaccurately). Then I go back over it and form it, find the right words, and turn the sentences the right way round.

Other kinds of writing to break blocks
The advice given by Elbow and Murray for free-writing is useful. Diagrams or visualisation can also help by opening up writing, and what Boice (1990) calls 'generative writing' is also useful. Generative writing involves fast writing (which can be shaped later):

- Write for five minutes
- Without stopping
- Then go back and re-shape it

Reflect back on the writing, using it as a prompt for discussion and future writing. Take a different-coloured pen, annotate, correct it, cut it into bullet points, expand some elements, remove repetition, and clarify some elements. The computer helps you to do this painlessly, but you might prefer writing on the computer, printing it off and working on it manually, then transferring to the computer again. Find a variety of practices which work for you and use them when you need to.

Rowena Murray's 'binge' and 'snack' writing (Murray, 2002) recognises

that sometimes we don't have long to write but can write something quick, focused and useful in a small 'snack', to be followed later with some long hours of writing, or a 'binge'. Write when you can, what you can, and ensure you take time later to shape, cut, edit and make it flow well, and say what you need it to say. Try it out on 'critical friends' whose judgement you trust and who can advise on whether it does your research justice and is sufficiently clear.

You could encourage students to break writing blocks by asking them to continue writing in their log or journal, or employing a series of other tricks to liberate their thinking and initiate writing.

> The most effective way I know to improve your writing is to do free-writing exercises regularly. At least three times a week … simply write for ten minutes (later on, perhaps fifteen or twenty). Don't stop for anything. Go quickly without rushing. Never stop to look back, to cross something out … If you get stuck it's fine to write, 'I can't think what to say, I can't think what to say' as many times as you want … The only requirement is that you never stop.   (Elbow, 1973, p. 3)

Murray comments: 'This is the opposite of knowing what you want to say first, and writing about it second' (2002, p. 78). The potential danger here is that it could just produce bad writing. If your students cannot change it into something coherent and eloquent, then they should avoid the exercise of 'splurge' or 'free-writing', but for many 'getting it down' then dealing with the appropriate expression is paramount. Free-writing is not just a therapeutic way to release the thinking and expression process. It might take a lot of practice to produce something and then work it into a well-expressed piece, but it can be a first step in the production of more written work and can also help those who find themselves hampered by the expectations of academic writing:

> Free-writing isn't just therapeutic garbage. It's also a way to produce bits of writing that are genuinely better than usual: less random, more coherent, more highly organized.   (Elbow, 1973, p. 8)

Students should be encouraged to try to:

- brainstorm initial ideas without having to express them perfectly
- get out of a writer's block by doing some writing – physically
- work through psychological, intellectual or emotional responses
- open up ideas by writing them down a little

- get the ideas and expressions circulating in their heads down on paper so they can move on
- gain confidence by writing – producing an *amount* to be edited later by articulating ideas and arguments in their head, however (initially) poorly
- avoid using halting, formalised phrases and getting tied up in them, and therefore *saying* nothing.

Visualise

Using diagrams and visualisation is another way of starting to write freely.
   You could try:

- Expressing contradictions through writing about both or more sides of an issue, separating, then linking them.
- Visualising complex or contradictory ideas, which can help to build up elements of an argument, underpinned and informed by primary sources, theorists and critics. Like free-writing, visualisation helps express the kinds of complications and paradoxes inherent in research.

Use a visual image to define the research area chosen from the whole potential field of study, defining this as your 'slice of the cake', where the whole field is the whole cake. This visualisation (see Chapter 00) adds some elaboration, imagination and development to the original idea. Sometimes visualising can really show contradictions, the rich variety of ideas, and the gaps you need to fill in an area of study.

Research as a journey and the writing as a building – a visualisation to help you think about your own writing

I use another diagram (see Chapter 00 for this image, an analogy) to compare research to a journey and the completed dissertation or project to a well built building.

   Consider the well-mapped but actually quite meandering research journey and the final, neatly built building with the themes, theories and arguments running throughout the whole, and the neat transitions from chapters to chapters and paragraphs to paragraphs. It could also help you to think about translating the research, which is about discovery, challenge, dedicated work, note-taking and detailing, into a careful piece of writing which:

- is well planned
- is coherent
- has themes and theories running throughout it
- has an argument running throughout it

- has claims backed by evidence and evidence forming the basis of claims
- has all the parts in their logical place in the whole.

You can also visualise using mindmapping tools, which let you explore ideas in a visual shape, a map of your thoughts, findings and questions, which then helps not only to shape what you are thinking and writing, but also to show weak areas which need further work.

Students could try *contrastive writing*:

- expressing contradictions through writing about both, or more, sides of an issue, separating, then linking them.

Example 1
Figure 9.1 illustrates a visualisation of a topical UK issue.

Expressing different strategies and paradoxes and indicating contradictions can help clarify a student's argument, making the problems more explicit. Suggest prompt questions and how and where they can add information, activities, references, quotations, other reading and data to the different bubbles or boxes of the arguments, starting to express the contradiction clearly and build a case.

Example 2
A student needs to explore the contradictions and tensions in postmodernism as they relate to postcolonial women's writing – and she is 'stuck'. Perhaps she could try expressing this as a visual image and then put it into words (Figure 9.2).

On the one hand, postmodernist theory argues that there is no coherent sense of 'I', self or subject, and, it argues, 'the subject' is a contextualised construction. But, on the other hand, it argues that because *everything* is a contextualised construction, there are no canonical texts or hierarchies with one culture privileged over another. It allows readers to recognise the importance and value of writing from a whole variety of cultures previously silenced, but notes that writers from 'silenced' cultures often work to assert identity, I and self, so they speak out *against* the silencing, claiming the empowering elements of postmodernism (but refusing those disempowering elements which reject the culturally constructed self, I, and subject).

Visualisation helps express the kinds of complications and paradoxes inherent in research. Elbow has some points about further work that suit visualisation also:

The Government's agenda:

Widening participation' in HE
(i) enables students from different
     class and age groups to benefit.
(ii) Universities aim to widen
     participation

But:
The government is urging universities
to charge 'top-up' fees which will
(i)   probably be greater at older, more
      established universities and for some
      more popular courses.
(ii) This will help fund HE

However, students most likely to benefit from the
widening participation agenda will *not be able*
to afford 'top-up' fees, and the universities
with the best 'track record' on supporting them will
be starved of funding.

FIGURE 9.1

After the exercise take a few moments or more to rest and think about
what you wrote. Think, too, about the digressions you started and perhaps
continued. Notice when they occurred and where they took you. Think
about their connections. Consider them as paths you should explore.
(Elbow, 1973, p. 10)

Other diagrams that can release thoughts might express an argument as a
continuum rather than a polarity, such as the exploration of colonial and
postcolonial expression illustrated in Figure 9.3.

Reflect, annotate, you are your own editor
Students can reflect back on their writing, using it as a prompt for discussion
and future writing. Suggest they take a different-coloured pen and annotate
or correct it, perhaps cutting it into bullet points – writing more for each key
point – cutting out elements that now seem irrelevant, clarifying the hazy
ones, adding new ideas, expanding or enhancing contradictory arguments,
and seeking exactly the right expression. They could do this alone or with

Past
silence and absence of
writing by women in imperial and colonial contexts

Postmodernism	Postmodernism
We are all constructions of time, place, others. This can recognise postcolonial women's writing but insists on no self, I, subject	– there's no inherent hierarchy of 'good' writing – different perspectives and writing forms are found, e.g. life writing and different cultures are valued. This enables valuing of other than established literary forms

Black women's writing from
postcolonial contexts uses the idea
of 'no hierarchy' and the valuing of
different cultures to write about different
versions of different selves
This writing negotiates a way through?
Often through life writing – and privileges a sense
of self and identity / self constructed from context,
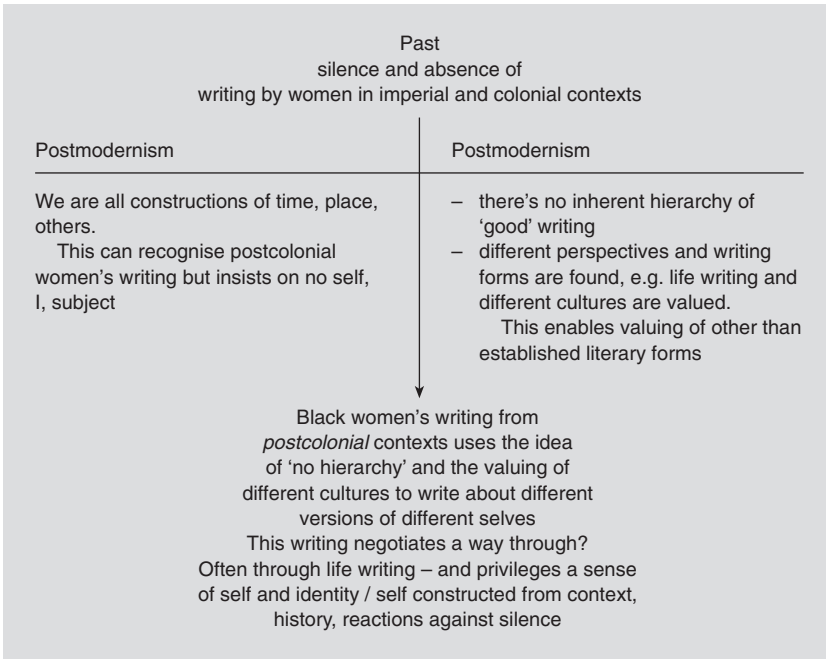history, reactions against silence

FIGURE 9.2

another student, critical friend or family member with writing skills. They can also do it as part of a supervision with you, their supervisor.

On his creative writing course at Ruskin College, Oxford, Alistair Wisker asked students to share portfolios of developing writing, critique, comment, and then reflect on how this peer exchange informs *their* writing.

> [...] students emphasized that although the critiquing process was power-ful and useful, it was also highly emotional and at times frustrating. The findings suggest that instructors should be very clear about the purposes and benefits of a strong and sustained critiquing process, and assist students in learning how to both receive and give useful feedback. (Caffarella and Barnett, 2000, p. 39)

Our own research (Wisker and Savin-Baden, 2009) also suggested that writing can be encouraged, freed up, informed and stimulated by multitask-ing – either moving on from the piece of writing in which you are stuck, to carrying out a more informative, busy piece of work (see 'busy work', p. 000

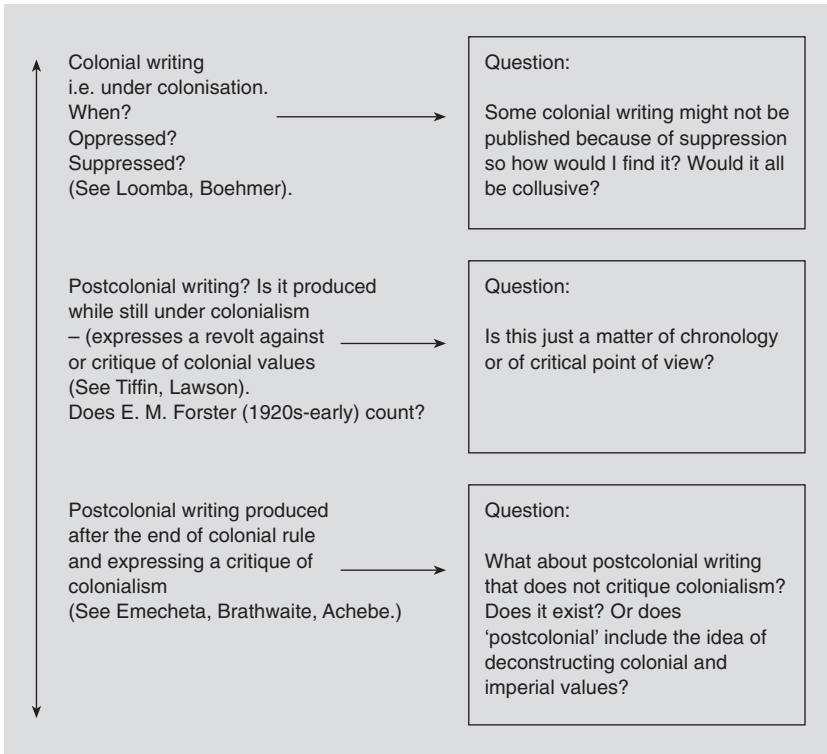|	
Colonial writing i.e. under colonisation. When? Oppressed? Suppressed? (See Loomba, Boehmer).	Question: Some colonial writing might not be published because of suppression so how would I find it? Would it all be collusive?
Postcolonial writing? Is it produced while still under colonialism – (expresses a revolt against or critique of colonial values (See Tiffin, Lawson). Does E. M. Forster (1920s-early) count?	Question: Is this just a matter of chronology or of critical point of view?
Postcolonial writing produced after the end of colonial rule and expressing a critique of colonialism (See Emecheta, Brathwaite, Achebe.)	Question: What about postcolonial writing that does not critique colonialism? Does it exist? Or does 'postcolonial' include the idea of deconstructing colonial and imperial values?

FIGURE 9.3

above), which uses a different, more logical, ordered part of the brain, and more straightforward language. Thus, you can free up the complex, conceptual thinking, to rest and be returned to, or to keep going, perhaps unconsciously, so that when the work is revisited and the words sought, they are more likely to emerge. Multitasking which involves NOT writing also frees up thinking processes and moves writers on from being stuck.

This could seem like procrastination, and, indeed, sometimes it is, but if alternative activities in order to take a break to free up the thinking are deliberately chosen, they can actually help release the energies which then feed into clearer thinking and expression.

One academic writing respondent said:

- it's not necessarily a conscious thing, that I go for a walk, although I think sometimes it is actually, occasionally it is, to go for a walk actually,

> I used to sometimes find, well well anything that actually isn't writing that shifts it …

- … Cooking, listening to a play on the radio, even going out with some people, having a glass of wine, so but but anything that is relaxing, rejuvenating, um, can move it … that kind of image that I was having is that it's like looking at a kaleidoscope you know and things go out of focus and suddenly they come back in again … and you can see the pattern.

The last statement, about seeing the pattern, suggests that stepping back allows them to be abstract and see what the ideas and arguments are, then to return to the writing and articulate that. From this particular piece of research, the most interesting idea I came away with from my own writing was that of 'managing the writing energy'. One academic writing respondent said: *'I only have so much writing energy, and it can be expended on internal bureaucratic documents and then it's gone'* (Wisker and Savin-Baden, 2009).

This always touches a chord with students and colleagues in writing workshops. We need to know what the best times of the day and night are for our really illuminated, articulate writing and to seize those moments for that writing, rather than using that articulate energy on emails or the more tedious pieces which we must write. Save that energy to fuel the conceptual, critical, creative, articulate writing, at whatever time of the day or night it is best to do it. It is important not to seem odd unless you want to, and people in my workshops tend to own up to what they think of as 'odd' writing times. For me, the best time is from about 4 am onwards for a few hours. I realise this is antisocial, but it is quiet, and I think clearly, disturb no one, and am disturbed by no one. The dog is now quite used to this and, mercifully, I only do it when I'm really engaged in a long writing task or one which needs to be done quickly. When I ask writing groups about their special times, a third or more choose the same hours, others choose the middle of the night – i.e. late – before they go to sleep. Very very few ever choose 2 pm–4 pm, so managing the writing energy recognises the best times to write. This will prevent the frustrated staring at a blank PC screen mid-morning on a Saturday, when they have cleared everything away to write for a short while and spent the first three hours on the domestic chores instead of the writing. Write first, if that is your time for writing energy (and later if it's later). Others need to respect this, so your student will need to negotiate with others. Someone who has been enabled to write and, as another of our respondents said, is now 'emptied out', will have renewed, different energies for being a more sociable, articulate person later in the day. They will also be seriously getting on with that dissertation, thesis or journal article.

Providing constructive and developmental feedback to help shape thinking and writing

Students can be silenced by over-critical feedback or confused by too much feedback. When annotating email attachments from students it is useful to use the 'Track Changes' mode in 'Tools', and to alter text in a colour, making other marginal notes in another colour (not red! This signals *bad* errors and looks patronising). However, some students accept all of the tracked changes and then your comments remain in the text – undigested. For changes of expression and some additional points, tracked changes are useful, but they do suggest that you, the supervisor, are doing the writing. Another practice is to use 'comments' in a box, which enables you to signal a concern or model a piece of rewriting; offer a question to the student to consider, such as how to make an argument clearer; offer an example of some theorising; provide suggestions for reading; and so on. This all clarifies, prompts and models rather than providing your own words instead of those of your student.

Understanding feedback aids writing

Rowena Murray has a helpful typology of comments from tutors at both the conceptual, critical level and that of presentation:

- Argument
- Clarity
- 'Develop'
- 'Discuss'
- 'Distinguish'
- 'Expand'
- The mechanics, i.e.
    - Punctuation, etc.
    - praise
    - probe
    - prompt
    - role switch
    - style

These clarify the kinds of thoughts readers have when working with the writing of others and so could be used when giving feedback to students on their writing, or in discussion, analysing the terms and considering what is expected in good writing.

Postgraduates I have worked with in development workshops often comment on the need for further clarification in supervisors' comments. I

thought I would use some of my own shortcomings as an example. On post-graduate work, I have commented:

'Please theorise more'
'Why does this matter?'
'Can you explore further?

which might all seem perfectly reasonable. However, my own students have said they were not sure what was needed in response to each of these comments. With 'please theorise', a clearer response from me as a supervisor would have been something like 'You have commented on issues of power and gender here – could you use Foucault's theorising on this in ... [even give a page reference if you have it], help to clarify that connection between culturally contextualised power structures and how they affect gender, and internalised disempowerment which the women in your study mention in their interviews?'

The use of theory, full references to further reading, and some questions to promote thoughts and problematise the excerpts of data from the interviews could 'nudge' the student to read further, engage with the issues the theory raises, and interpret the data more specifically in relation to the argument as underpinned by their theories. That is the intention behind 'please theorise'.

'Why does this matter?' is a colloquial piece of questioning and how it is read depends on your relationship with your students. You are asking your students to ensure they can explain the importance of their work and justify their arguments, evidence, and theory, in context. For some it could unintentionally seem like an insult to their work. Their responses could be culturally conditioned or related to the different gender, age, position, etc., you occupy in relation to your students. For some others it can be seen as a nudge to ensure they are being clear about the importance of this argument or point in the overall dissertation or thesis, to remind the students that whatever they argue or assert needs to be backed up by evidence, and to indicate overall the contribution this work is making, i.e. why it does matter. So it is not an insult, it is a prompt to writing and argument.

The third point seems to be asking for expansion and yet it really wants the student to go into more depth, use theory to support the argument, interpret using theory, and not just give evidence without linking it into the argument and overall structure of the dissertation or thesis. It is a request for depth and cohesion rather than for 'more'.

Early dialogues with students can develop mutual understanding of the discourse and responses we use when commenting on their work, but

clarification also helps, as does a model, an example. Feedback is needed which genuinely contributes to learning, which feeds forward, i.e. prompts thought, further work, and the problematising of arguments and issues which seem taken for granted.

Murray suggests how students can translate and act on supervisors' comments. Discussions with students also produce some helpful ideas on feedback. Supervisors need to use explicit comments to model examples, to encourage understanding by providing detailed ideas and/or examples of parts of this clarification in detail, and to differentiate between social and critical comments.

I have developed comments that attempt to encourage critical thinking and are derived from counselling. Look at Chapter 8 on supervisory dialogues for examples of wording that suits interaction categories and, slightly altered, could be used to comment on written scripts.

Examples of kinds of comments

- You need to ensure apostrophes are in the right place: it's = 'it is', its = 'belonging to it'; instead of 'people I worked with' try 'people with whom I worked' (*punctuation*, *grammar*, *spelling*, *style*)
- Please comment on your table; discuss how the quotation exemplifies your theme (*argument*, *specific relevance*)
- What do you understand 'ontological insecurity' to mean in Plath's poetry? (*asks for conceptualisation and further discussion*)
- Tell me more about the link between the specific act and general trends (*expand*, *important point*)
- You say 'it was an age of great change'. For whom? When? In what ways? (*clarity needed*)
- Why do you think Heads expressed role conflict? (*probing and prompting*)
- Another person might argue that (*changing perspectives to expand thinking*).

Pointing out the need for clarity, expansion, discussion, inclusion of data in a discussion to ensure it acts as evidence for claims; encouraging argument, conceptualisation, critical thinking; *and* suggesting accurate detail and appropriate expression, are all important in feedback. You might find it useful to signal different kinds of concerns. These could range from the conceptual/critical, to issues of clarity of argument, to use of data.

- You have obviously covered a great deal of reading here ...? (*comment on momentum*)

- Add a short paragraph about Bloom's main points here (*expanding the information in your points*)
- Do Bloom and Dewey really disagree about curriculum models? List them, expand where they agree and where they differ (*developing the complexity of student arguments with differentiation*)
- You have repeated various phrases here – can you find another word for 'focus' or 'refocus'? (*tidying up writing style*)
- Be more specific. This is a little generalised (*focus, expression*)
- How many argued that the curriculum was too 'packed'? (*accuracy*)
- What did they mean, and do you mean, by 'packed'? (*asking the student to be more specific, detailed, accurate, refined and discriminatory*)
- Were there any more differentiated points about the 'packed' curriculum made by the respondent? (*expand, open up*)
- Read more of Entwistle's (1998) points here. See pp. 34–8, 120–2. What does he argue about the changing purpose of the HE curriculum? (*guiding reading by being more specific*)

One supervisor comments on the use of feedback to aid student writing quality:

> *I see a development of critical thinking, of rigorous examination of informa-tion, rigorous questioning of information in order to establish its validity, its relevance and so on and I think that process develops in practice.*

They go on to explore the ways in which they engage in feedback with students' work:

> *You ask questions. You say, 'Why do you say that? What has it come from? What's the connection between this statement and anything that you have stated before, where was the material from which this statement, this conclu-sion apparently derived?' and if there's a good answer to your question then there's a secondary question, 'Well, why doesn't it say that in your writing?' and if there isn't a good answer then it's an indication that the student needs to go away and think more carefully and not to present conclusions – even low-level conclusions in the form of statements or assumptions – that don't arise from that evidence. As I say, I think that most students are quite recep-tive to that because they have begun their doctoral work with a higher than average acuity for critical examination of information – much higher than the general population.*

You will probably find it useful to look over some of your own examples of feedback to ensure you are being absolutely clear in the guidance of

student writing. In the online 'Teaching and Assessing Master's Students' course to which I contribute at Oxford Brookes University, one part of my input is a podcast concerning feedback and feedforward. I suggest that we think about feedback as a developmental dialogue with students, engaging them in thinking about articulating, evidencing and arguing through their work in a clear way. An activity we use on the course is to ask participants (supervisors) to review a piece of their old feedback and see what messages it gave the students – whether it tended to inform them about facts, measure them against some expected norm, or sum up their achievements without pointing them forward to further development. After reflecting, the supervisors rewrite the feedback, ensuring it prompts ideas with questions and opens up areas on which the student seems silent or confused by discussing these briefly. It also offers models, thought-provoking questions, pointers such as 'another person might suggest that ...' or 'someone else could argue that ...' and asks them to engage with theorists and critics whose ideas could help underpin their own arguments by agreement, contradiction or extension. The dialoguing of the formative feedback feeds forward into future work as well as giving the students a sense of how much they have grasped and what else there is to develop. Sometimes our comments tend to remain at the level of presentation and information – 'this needs to be expressed more clearly', 'develop this argument', and 'the date is 1998'. Informative comments serve their purpose but some need extension for the student to see where to move on and what to engage with. Comments that identify success with and/or point the way forward for more conceptual, critical and creative work are usually needed. Also, questioning and engagement with alternatives, contradictions, differing views and models often helps this movement. For example, in trying to engage students in moving beyond the informative we might say: 'Here you are looking at learner development as a straightforward journey of improvement along fairly set lines. Meyer, Vermunt and others talk about variation and dissonance related to the ways in which some learners show they learn differently from others; have a mismatch, for example, between the way in which they believe learning takes place, e.g. acquiring facts; and what they seek to do with this learning, e.g. transform, change and develop. What does considering such dissonance contribute to your own thoughts about learner development here?'

Such comments can engage discussion and extension, leading to conceptual, critical work.

We also suggest the 'feedback sandwich'. This involves positive comments about achievements, then advice, suggestions and questioning, then some more positive comments. The sandwich makes suggestions even about really large changes and misunderstandings seem more palatable. The

middle of the sandwich, the comments and prompts, problematising, dialoguing, suggestions and models, must be in there for the student to move forward, but if they only have those points they could feel they have nowhere to move to and no good points in their work on which to build.

Activity

Take a piece of your own feedback to one of your students, analyse, evaluate and improve on it, considering it as if you have just received it yourself.

(1)   What language is being used to comment and feed back?

Is it informative? Summing up achievements? What is *your* response to this feedback when you read it? Do you feel you are being asked questions? Led forward with prompts, problematising and suggestions?

(2)   Are there enough positive comments on the work for your student to feel they have something on which to build?

(3)   How could it be made clearer, less final and summative, more formative and suggestive of development and further learning? (Look at the work in Murray (2002), and in my examples in this chapter.)

(4)   Now please rewrite the feedback in the form of a feedback sandwich – (a) positive comment, (b) detailed comments on theory, argument, evidence and so on, prompts, for clarification and deepening of the argument (or whatever is suitable here), and then (c) a positive nudge forwards into future work.

(5)   Look at it again.

How does this read? Would you feel supported and enabled to move forwards in future work?

► Conclusion

Most writers get stuck at some point in their writing journey, and would benefit from developing a repertoire of strategies to help them move forward with their writing, and clarify and express their ideas more clearly so that their work is received in a positive fashion (it passes, it gets published, people engage with what it says). The way we feed back can encourage students to engage with writing at a more conceptual, critical and creative

level. Sometimes students need models and extensions to see what this might look like, and what discourse or argument looks like in their own discipline, so they can develop it in their own work. Writing exercises using extracts and activities related to *your* subject and *your* students' needs will also help encourage good writing.

A key point for all students, no matter their level or subject, is to *start writing early* and get the ideas and argument out there, so, together, we can help shape them into the best possible form for communication and the creation of new knowledge.

► Further reading

Caffarella, R. S. and Barnett, B. G. (2000) 'Teaching Doctoral Students to Become Scholarly Writers: The Importance of Giving and Receiving Feedback', *Studies in Higher Education*, 25(1), 3–52.

Dunleavy, P. (2003) *Authoring a PhD* (Basingstoke: Palgrave Macmillan).

Morris, J. and Meyer, J. H. F. (2003) 'Variation in the Conceptions of Learning of Physiotherapy Students in England and Wales: A Longitudinal Multicentre Study', in C. Rust (ed.), *Improving Student Learning Theory and Practice – 10 Years On* (Oxford: Oxford Centre for Staff and Learning Development).

Murray, R. (2002) *How to Write a Thesis* (Buckingham: Open University Press).

Wisker, G., and Savin-Baden, M. (2009) 'Priceless Conceptual Thresholds: Beyond the "Stuck Place" in Writing', *London Research Education*, 7(3), 235–47.

Part 3

Working with Students – Issues for Supervisors
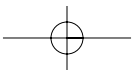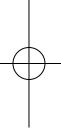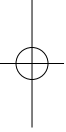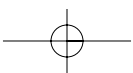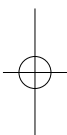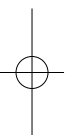
10 Helping students to help themselves and each other

This chapter looks at ways in which we can support students in developing communities and peer support practices, family and friend support practices, and their own emotional resilience, in order to help them continue success-fully towards completion of their research and examination, and beyond.

Research is both quite an isolating experience and one which engages us in communities of learning, discourse, knowledge creation and sharing. Kathryn Owler identifies ways in which the increasing focus on ensuring completion, potentially a managerial (Park, 2007; Phipps, 2009; Phipps et al., 2007), output-driven approach to PhDs in universities, can actually underpin university investment in the development of supportive research cultures:

> One advantage of all the notice now paid to the doctoral degree is the number of initiatives that have been put in place to support students within many universities. These include departmental programs, efforts to build communities of thought, support groups, career envisioning initia-tives, e-training and support, counselling and training programs for students and support and training for supervisors (Davis et al., 2006; Emilson and Johnsson, 2007; Frame and Allen, 2002; Park, 2007; Wisker et al., 2007).   (Owler, 2010, p. 291)

Supervisors cannot and, I would argue, should not provide all the support students need to carry out successful planned research through to comple-tion. Students can greatly benefit from entering and contributing to a supportive academic community, so beginning to build sustainable research capacity. Developing and entering such a community can be a very fruitful way of working towards creative solutions to problems, maintaining momentum, and developing sound writing practices enhanced by the input of critical friends. Margot Pearson and Angela Brew (2002, p. 142) advise expanding the 'dyadic' relationship to include a broader academic commu-nity, and research we have carried out with supportive postgraduate

research communities (2003–2010) suggests the important contribution they can make to maintaining momentum and aiding the quality of student writing through critical friend responses which start a supportive peer review process. Discussing the developments in the supervision role from that of a close professional personal relationship to one more focused on ensuring skills development, manageable projects and timely completion, Halse and Malfroy (2010) build on the work of others (Allen, Smyth, and Wahlstrom, 2002; Malfroy, 2005) and note 'the evolution of new supervisory practices, including collaborative knowledge-sharing activities such as supervisory panels, group supervision and peer groups' (p. 81). Knowledge sharing, collaboration and community building takes place between members of committees and panels, and members of wider communities both local and international. Postgraduates are entering a local and international community of researchers, and the networks they can be introduced to, or can find for themselves, can lead to fruitful exchanges of ideas, future joint projects and research capacity building on a more global scale. As supervisors we can help with both kinds of community and network through putting students in touch with each other, urging the university to provide opportunities for communities to develop and be nurtured, and passing on contacts so students can be in touch with others working in their field.

Additionally, as our research first into communities of practice (in 2003) and latterly into wellbeing and emotional resilience (in 2010) has shown, students value the personal and professional nature of communities which can offer both a reality check on the work – suggesting ways forward when it is stuck, offering critical friendship with reading and suggestions for solving methodological problems – and emotional friendship-based support. These can reduce stress, enhance wellbeing and emotional resilience and last beyond the research project. There are also online provider/sources/ communities, particularly (in the UK) Graduate Junction at www.graduate junction.net/, focused on the needs of postgraduates, which provide brief, informative, insider articles and links to other longer work, focusing on everything from starting the research project and managing the supervisor through to the viva, and job-seeking beyond the doctorate. Graduate Junction has an online resource library which can support students' work, as can the numerous books available (such as my own *The Postgraduate Research Handbook*, Palgrave Macmillan, 2nd edition 2007, and others referenced in this book). The Postgraduate Toolbox is contactable via info@post graduatetoolbox.net. They also have useful articles, a newsletter and email contact, with 17,000 postgraduates and supervisors, and a blog, twitter and facebook pages through which students and supervisors can keep in touch with each other and discuss issues.

This chapter considers:

- *setting up peer groups and academic community support*
- *critical friends for writing support*
- *staff and student seminars*
- *online support*
- *research development programmes (RDP), including specific work-shops and models.*

Research at all levels is an individualistic endeavour in which students become involved in developing their own ideas, carrying out their own research, and completing and writing up their work. Science students and some social science students involved in large funded projects are more likely to be able to work in project groups and interact on a regular basis, which can be supportive of development if discussions involve processes, theories, and analyses in the research itself. For some involved in large project group research the main danger is losing that individual focus, the ownership of their slice of the research. It is important to ensure they have their own project embedded within the larger project, which can be defined and circumscribed while still being recognised as part of the larger project, so that in the end the thesis or dissertation can be assessed and the student's work rewarded. For the PhD or EdD, students have to defend their work on an individual basis in the viva. However isolated that nearly final moment is, supportive groups continue before and after it, whether with others in the same building, or across the world, sharing work in progress and eventually presenting at conferences and co-writing. Experience and current research into student retention suggests that friendship groups, peer groups and social networks are essential for the maintenance of momentum and continuation of a student's commitment to study, in short, for success. The sustainability of research communities is something we build towards when developing successful research projects and hoping to disseminate and cause change because of our ongoing work. To some extent, some of this general support comes from the supervisor – one person certainly interested in the development of their students' work. But the supervisor is not alone in providing support, development and contact for students. Instead, increasingly, institutions are recognising that formal, institutional support, in the shape of research development programmes, days or sessions (depending on the level of study), as well as peer group support, can ensure students do not become overly dependent on their supervisor. This also prevents supervisors

being swamped by their students' various needs (some of which are better addressed outside the supervisor–student role). In some instances, the supervisor can play a key role in establishing and helping to maintain peer groups or student research groups. In others, the momentum is the students' own.

> Discussion of coaching and mentoring may seem to indicate an implicit assumption of dyadic relationships. Yet, research students can and do depend on a range of people to provide various forms of assistance in learning research expertise and how to be a professional researcher. These significant others can be those in a department, a laboratory, a disciplinary network, or a university and its resources.   (Pearson and Brew, 2002, p. 141)

Students are also supported by a range of formal and informal services within and outside the university. Many universities offer writing support, editing and translation services, and where they do not, students seek such support outside with mentors, coaches and writing developers. For emotional and personal support they use friendship groups, relatives and their peer groups. As supervisors, we can let students know of these options and provisions and help to set up and insist on some of the more formal support systems that develop and maintain communities. In my view, any potential for collusion is far outweighed by the emotional and intellectual support such groups and services offer, which encourage independence (from you as supervisor as well as more generally) rather than dependence.

▶ Reading /writing groups and sharing work in progress

Reading/writing groups are one form of student self-help. They are essentially groups of students exploring ideas together and sharing various problems, whether of motivation, methods, fieldwork, expression or completion. Such support minimises the need to contact supervisors for relatively minor technical questions, ensuring several students can approach the supervisor with key, well-thought-out issues. There are two English PhD reading groups at Anglia Ruskin University, one, the formally established support for PhD students, and the second, a group, '4 guineas', which grew out of the first of those support groups and wanted to carry on beyond the PhD achievement of most of the members. The first, more formal, group provides work-in-progress seminars, inviting staff to contribute, for example, to mock viva development. This leads to joint publications and co-presenting at confer-

ences. The English department has hosted a number of postgraduate/staff and postgraduate conferences either specific to Anglia Ruskin University or in conjunction with, in our case, Cambridge University. These serve developmental, confidence-building ends and help to build a wider academic community. Students 'mock viva' each other, lobby for facilities, and nurture the growth of each other's academic success. The MA Women's Studies dissertation students stay in touch less formally – by email, by joining in a weekend away and having working lunches. The '4 Guineas' group has lasted for at least eight years to date, runs in the homes of the members, including staff, and supports the book writing and publication, the conference presentations and journal essay publications of the members. Recently, two have sent me a joint essay and another has submitted a second book for publication. That these groups have developed the supportive non-competitive culture of critical friends, peer writing groups and the maintenance beyond the achievement of the PhD is evidence of sustainability of a research culture.

Exploring similar writing communities in Australia and taking an academic literacies model, Aitchison (2009) notes of one group questioned that: 'When students were asked to reflect on *how* learning occurred both in the survey and in the focus group discussion, they expanded on the notion of learning arising from feedback on their writing, to include discussions about how learning also (and unexpectedly for them) occurred when they were engaging in the critique of peers' texts' (p. 908). In this Australian example, peer support provides help at several levels as well as a choice of publication outlet. Commenting on Rollinson's research (2005, p. 24), Aitchison notes that 'the more seasoned writing group participants recognised that learning came from engaging in the process of critique, as much as in simply receiving it' (2009, p. 915). In South Africa, a group of women academics called 'PaperHeaDs' got together in the 1990s to support each other through the development of their PhDs. Two are now professors, all have achieved their PhDs, and recently they delivered on issues related to academic writing at the HELTASA conference in South Africa (2010). One has completed her PhD on the topic of the PaperHeaDs group and doctoral learning development. Liz Harrison's PhD provides rich testimony of the interactive supportive working practices of the paperhead group, which reviews each other's work, acts as peer critical friends, provides an online community and ensures work presented for assessment is of a high quality. PaperHeaDs has provided a space and a human mechanism to enable the group members to develop their identities and voices as doctoral candidates, then PhDs, writers and postdocs. The community is vibrant, as there are new members, and is at times both challenging and supportive.

Liz Harrison's account of her own development as a PhD is an autoethnography of the experience of PaperHeaDs, which identifies different responses to the doctoral learning journey, and different relations between the women, the women and their research, and writing. It provides something of an alternative to the individualistic lonely space of the doctoral student, engrossed in study, and the thesis offers insights into the ways in which undertaking the doctorate is troubling, troublesome, and challenges constructed identities, learning, and cultural, economic, ethnic, gendered, aged personal backgrounds. Harrison quotes Bartlett and Mercer: 'It may be that it is exactly this liminal space, usually occupied only by the individual doctoral learner, that has been documented as the "lonely" space of doctoral study' (Bartlett and Mercer, 2000, p. 199). Then she integrates their work with her own experiences and reflections about the power of the relationship and creative professional interactive space of 'PaperHeaDs'. This study suggests that creating spaces for seeing, hearing and affirmation of the 'self becoming', outside formal classroom settings, will create the environment in which doctoral learners can move more quickly and happily, satisfying institutional needs for throughput and retention. Spaces for connection between the self that was, is and is becoming, through in-depth conversation and life storytelling, may be more valuable than any number of seminars on methodology. The PaperHeaDs give an account of the value of Getaways as spaces for serious 'play' yet also rehearsal of scholarship, which allowed us to find out 'just how me I can be as a scholar'. Their developments as scholars is enabled by hard work supported and vitalised by their creative, challenging, personal, professional and scholarly interchange and support. 'It is a rich community experience' (Harrison, 2009, p. 329).

▶ Online communities – chat-rooms and discussion forums – examples

Not all students are available, mobile or close enough to get involved in reading/writing critical friendship or work-in-progress groups face to face. For those who work at a distance, replicating such a community in an online environment provides opportunities for sharing, debate, support and development. Online chat-rooms and discussion forums related to research can enable the exchange and development of ideas and support over difficulties.

In the MA Learning and Teaching at Anglia Ruskin University, and the Postgraduate Certificate in Higher Education, and master's modules in doctoral supervision and writing for publication at the University of Brighton, students talk with each other and with the staff or supervisors in the VLE

(virtual learning environment), or the community-space web environment. In the discussion area, staff and students post up questions and answers, engaging in debate around texts read and work requested. In the chat-room, the 'café', students discuss their progress and queries for the writing module. They develop individual as well as shared blogs and share work, working with each other as critical friends in groups established in the initial face-to-face sessions, or with participants based in Iraq, for instance. This enables some overall involvement in a learning community across different time zones and thousands of miles.

In some instances, staff may or may not have access to a chat-room or they may have their own chat or staff-room for development and discussion purposes. This creation of an online community only works if everyone can be logged on and into the Blackboard WebCT, First Class, or other environment, and if they feel comfortable participating. Initially, establishing such comfort often involves staff and students undertaking diagnostic activities to determine their levels of usage of IT facilities and the VLE, with the whole group playing with the environment, posting comments and generating discussion. Postgraduates studying for the PGCertHE in the Centre for Learning and Teaching at the University of Brighton, but actually working in Kurdistan/Iraq, communicate fortnightly through an online action learning set using Flashmeeting. Tasks requiring discussion and then the on-screen reading or printing out of assessable materials, which are relevant, staged, timed and compulsory, encourage regular usage. Once regular, learning-oriented usage is established, the habit of entering the environment encourages discussions and chat. This in turn reduces isolation, helping students (and staff) articulate their success and the queries they have about research development. If students share amongst each other, they might feel more able to explore problems and solutions with peers. If staff join in, a single helpful idea or piece of information often saves a great deal of time and anxiety. Alternatively, mixed discussions can promote ongoing debate about complex conceptual issues.

An international master's course based at the Cambridge Programme for Industry developed some of these strategies, involving students grouping over great distances, posting questions and discussion to each other and copying this off for assessment purposes in a portfolio indicating reflection, activity, engagement, support and development. One group leader for each group moderated discussions, ensuring everyone felt engaged. 'Lurking' (reading others' comments without participating) might be fine in an online discussion, but when generating work towards assessment, it is parasitic of others' ideas. Involving work-related activities is essential. In the Open University 'educational research methods in action' master's, students could

use First Class to engage in discussion about their work between themselves without the tutor, and their assignments were delivered and fed back using the online environment, while staff also discussed in a staff forum. There is a tutors' forum for the Oxford Centre for Staff and Learning Development (OCSLD) course on teaching and assessing online, and the course on master's supervision. This is only available to the tutors and provides a place to share problems and solutions. Staff and students engage in sharing work in the discussion forum. None of this is rocket science, but overcoming some barriers to working in an online environment is still a leap of faith which needs technologically aware, careful support from the staff member and someone else responsible for the technology, and from the students between themselves and with each other, so that everyone can be involved for this working at a distance. This space offers opportunities to share work and discuss issues, where distance would otherwise make that impossible.

▶ Seminars, peer group exchanges and conferences

Many universities enable students to support each other and to develop collegial communities by ensuring there are seminars, symposia, postgraduate conferences and informal peer exchanges. Such opportunities enable students to share the achievements and problems of work in progress, receive critical and constructive comments, and build longer-term deeper collegial professional friendships, which can lead to joint projects and support in the future. They also offer useful opportunities to pull work together for presentation, and students in our Doctoral Learning Journeys project (2007–2010), as well as their supervisors, identify such presentation moments as offering the chance to stand back, appreciate the shape of the work and progress so far, and seek support, thoughts and some challenges to enable further work to be done.

For example, building on US models, at the University of the West Indies, students are encouraged and expected to disseminate and share their work-in-progress with their peers, supervisor and other colleagues at staged seminars throughout their research. Here, they deliver on the questions, conceptual framework, design of the study, problems faced, surprises, analyses, findings and changes in their work. They compile seminar presentations, marking stages in their progress. The contribution of others present as critical friends greatly helps the continued development of students' work, helps build confidence and reduces isolation, giving students a sense that they can share problems which may be specific to their work but, more often than not, are quite common and generalised and in relation to research stages.

Students practise discussing their research and defending it in preparation for a viva. Students can, effectively, join and maintain a 'community of practice'.

Delamont et al (1997) build on an apprenticeship approach developed by Lave and Wenger (1991), situating learning in communities of practice involving a range of participants, each with differing histories of membership – apprentices, established academics, relatively new master's and 'journeyfolk'. Learning occurs through participation in the social practice of the community. The apprentice has a special status as 'legitimate peripheral participant' (LPP), invited and enabled by a master or sponsor to participate as a potential member, accessing the practice without being fully expert. Commenting on research-oriented apprenticeship and LPP models, Pearson and Brew note:

> Under these circumstances, it seems typical that apprentices learn mostly in relation with other apprentices. Further conceptualisation of 'communities of practice' by Wenger provides additional understandings of the complexity of how people learn 'on the job', and the relationship of more structured training where the learner learns 'about what to do', with the learning that occurs in practice where participants 'do things together, negotiate new meaning, and learn from each other' (Wenger, 1998, p. 102). The value of this approach to apprenticeship according to Guile and Young (1998) is that it offers a conceptualisation of learning that avoids the separation of learning from knowledge production, a concern raised by student groups (Smith, 2000). Lave and Wenger are careful to insist that communities are not static nor necessarily peaceful.   (Pearson and Brew, 2002, p. 142)

Bridging the student community and the research development programme communities, Queen's University in Canada focuses on using the curriculum studies elements for the North American doctorate model to build support and critical friendships amongst doctoral students. In the US model, rather as in the EdD and Prof Doc, there is ongoing course work, and while for the EdD and Prof Doc this leads to chapters for the thesis, in the US model it leads to assignments on topics for the coursework, from which could well develop the main focus for the final thesis. In some models the oral defence takes place before the final thesis is constructed, as a gatekeeping mechanism to ensure its quality, and in other universities the oral defence takes place at the end, as in the UK model.

Doctoral students at Queen's have written about the collegial community experience and its bonding of support and of values: 'By doing curriculum

studies, we are called to bring our own conceptions, as experienced and embodied knowing agents, to bear upon these readings. With inclusivity as an articulated principle, we offer our individual understandings to a discussion of multiple perspectives reinforcing 'a commitment … to caring for ourselves, for others, for ideas, and for the earth' (Brook et al., 2010). 'This intensive, integrated experience of learning enables the construction of knowledge through our relatedness and connection to community' (2010, p. 659). Their community orientation also reflects the respect for indigenous communities as a location for learning, as indicated in the references to the holistic and ecological issues. They also challenge the restraints of the doctoral programme, and collaboration meeting and mentorship, eventually suggesting that they 'understand a newer conception of doctoral education that works on a generative, collaborative and reflective framework. Specifically, we are pushing toward a conception that structured opportunities for students to find common places for joint meaning-making and for students to reflect on their learning – their originality, voice, relations and passions' (2010, p. 666).

▶ **Research development programme**

Increasingly, students undertaking a master's, MRes, EdD, PrD and PhD are involved in research development programmes to enable their construction of workable proposals and appropriate, manageable, significant research. Often, with input over time, programmes enable students to develop their skills, research methods, question framing, literature reviewing and the integration of theoretical perspectives to drive the research. Programme inputs and exercises model and encourage good practice in the analysis and interpretation of data, turning these into findings and drawing conclusions, both conceptual and factual. Such programmes also focus on developing the skills of writing a good dissertation or thesis and, in the UK and European traditions, viva defence preparation.

Professionalisation of the PhD development process is paralleled by smaller-scale development activities, commonly undertaken by master's and undergraduate students. All of these complement the supervisor's work with students throughout their research, and their thesis or dissertation writing. Research training might be only an hour-long talk or a couple of Saturday workshops. These kinds of events serve many purposes, such as development, and academic community building. However, research development programmes are contested, forming part of the 'training' model of postgraduate learning and support. On the one hand, they offer development activi-

ties, clarification and a community that an individual supervisor alone could not. On the other hand, in their professionalised approach to developing research skills, they are enabling, but homogenising.

Cullen, Pearson, Saha and Spear (1994) argue for a structural response in research encompassing more than individual supervisory arrangements. Pearson (1999) argues that a 'training' model is too limited. Instead, PhD students should be positioned as learners of the professional practice of research and scholarship in a form of professional education. Following Holdaway (1996), Pearson suggests a:

> conceptual framework of activities and foci distinguished. In this frame-work the emphasis is on the interrelationships of the components of a graduate programme. The intent is to show that although the production of the thesis is the primary focus and outcome, other learning is impor-tant. Primary activities are given as: research; required coursework; reading; reflecting; discussing; and writing. Secondary activities are: optional coursework; teaching; publishing; preparing conference papers; and preparing research proposals. Holdaway sees the secondary activities as 'an integral part of the graduate education experience'.   (Pearson, 1999, p. 277)

In many universities worldwide, a master's in Research is now required before undertaking a PhD, EdD or PrD. This staged activity recognises the need to equip students with appropriate research skills and building blocks, not only for their intended award but for future research. The award of a master's is an incentive for many. For UK Open University students embark-ing on the EdD, a master's in Education is essential. More recently, even those with a master's have taken E835 'Educational Research in Action' *because* it focuses on stages of developing a research proposal *and* on research skills building blocks. The course is assessed by three assignments focusing on developing an effective research purpose, one other assignment and an exam on distinguishing between research methodologies and methods. Additionally, in the exam, students critically evaluate the match between research claims made, and research-based evidence provided. With EdD and PrDs, students move through a series of staged progress reports, building up to a final thesis. Programme support enables this development.

Research development programmes commonly follow the stages of a student's research. We will consider one model, an RDP developed for the cohorts of international and UK-origin PhD students at Anglia Ruskin University. This RDP is accompanied at each stage by action research – encouraging reflection on their own learning to establish students as

collaborators and reflective learners. The first stage of the programme focuses on the development of a research question, the conceptual framework, introducing research methods and the writing of a research proposal. It helps students articulate, share, develop and – if necessary – change their research design and research methods. It also helps to build peer support through group work. Additionally, involvement in reflective and evaluative activities during and after workshops helps further develop meta-learning – an essential prerequisite for the aware learning development necessary to undertake and learn from research activities (see Biggs, 1991; Flavell, 1977). Elsewhere, we have written about the specific workshop, supervisory dialogue and action research elements of the three-stage RDP that encourage meta-learning (see the EARLI (2003) – *IETI* 2004 special edition).

Action research set within the framework of the RDP enables students to focus on key stages in their work. They work on the proposal (stage 1), the progress report 'confirmation of candidature' (stage 2) and writing up, preparing for the viva (stage 3) (see figure 10.1). At each stage, a major consideration is exactly how their research methods genuinely enable them to achieve research outcomes. Results of action research feed directly into workshops, supervisory dialogues, and students' and staff reflections, combining both quantitative and qualitative methods. The quantitative methods (RoLI, 'Reflections on Learning Inventory', in Meyer and Boulton-Lewis, 1997; the Research-as-learning questionnaire in Wisker, 1998) enable us to identify patterns of learning approaches and conceptions of research-as-learning for individuals across and between cohorts. The qualitative methods (focus groups, supervisory dialogues) enable us to see how students grapple with, carry out and interpret their research aims and progress, using methodologies and research methods within conceptual frameworks. Each runs alongside, making direct use of intervention processes of research development workshops and supervisory dialogues.

Workshops addressing research methods and conceptual frameworks

Workshops in stages 1 and 3 of the RDP focus on the development (stage 1) and then the final coherent clarification (stage 3) of the students' conceptual frameworks.

In an early 'Methods workshop' (stage 1), following some input on methods, a number of activities aim to engage students in developing sound conceptual frameworks and appropriate research methods. The session is held in small groups, and collective responses to workshop activities are taped, after completion. Results from sessions indicate student reflection on methods, showing a correlation between choice of methodology and
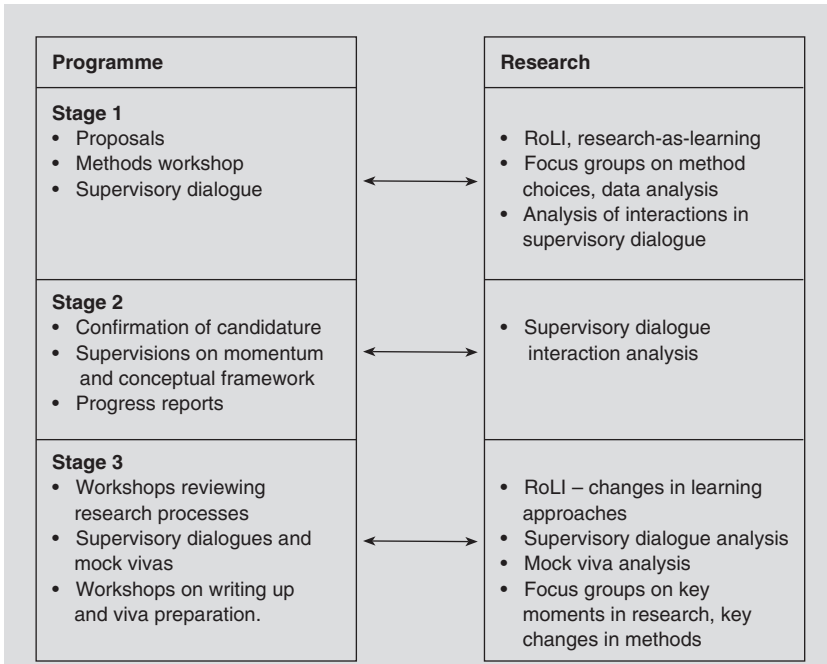
Programme		Research
Stage 1 • Proposals • Methods workshop • Supervisory dialogue	←→	• RoLI, research-as-learning • Focus groups on method choices, data analysis • Analysis of interactions in supervisory dialogue
Stage 2 • Confirmation of candidature • Supervisions on momentum and conceptual framework • Progress reports	←→	• Supervisory dialogue interaction analysis
Stage 3 • Workshops reviewing research processes • Supervisory dialogues and mock vivas • Workshops on writing up and viva preparation.	←→	• RoLI – changes in learning approaches • Supervisory dialogue analysis • Mock viva analysis • Focus groups on key moments in research, key changes in methods

FIGURE 10.1   ACTION RESEARCH AND 3-STAGE RESEARCH DEVELOPMENT PROGRAMME

methods, students' research questions, which the methodology and methods help to ask, and research-as-learning approaches taken by students. They expose ways students might realise difficulties inherent in using research-as-learning approaches, producing large masses of data somewhat removed from their object or outcomes, for example. Results also indicate students' growing awareness in some instances that a variety of approaches, or methods, differing from those planned, might be better suited to their own research questions and aims than a single, probably quantitatively based, approach.

Group work runs for an hour, then students reflect on the experience and feed back, one person reporting on both the process and an individual case of his or her own or another person's research methods. In 2000, two groups chose to elect a spokesperson who fed back on someone else's methods, adding succinctness and clarity to the description. Observation of the group work on this occasion was fascinating. Students were clearly involved in explaining very precisely and then encouraging questions, suggestions and debates with others. All of this aimed to help them define and refine their

methods (changing them if necessary). They found overlaps in methods – one group claimed they were all doing case studies – and some real contrasts that helped them to define their own choices. Co-counselling of supportive peers can enable students to clarify and focus on their methods. We hope such support will continue.

Methodology and methods clarification and sharing workshop

(1) **10 minutes**
- On your own: what methodology are you using and why?
- What methods are you using and why?
- How does this fit in with your conceptual framework?
- What changes (if any) have you made to your methodology and methods and why?

(2) **Get into groups of five. Present to your colleagues (one person feeds back**)

Rules
- Five minutes each
- How did you decide on your methodology and methods?
- How do they spring from your conceptual framework and so help you *find out* what you are researching about?
- How have you *developed* or *changed* your methods? Why? To overcome what difficulties? Or to ask questions differently? Or?

(3) **Feedback**
- Sum up what your group members have said – chosen methods, changes, why?
- Select *one* as a case study to describe, defend methods, explain how they *really do* fit with the conceptual framework and help achieve research aims!

Remember:

A conceptual framework explains, either graphically or in narrative form, the main dimensions to be studied – the key factors, or variables – and the presumed relationships among them. Frameworks come in several shapes and sizes. They can be rudimentary or elaborate, theory-driven or commonsensical, descriptive or causal.   (Miles and Huberman, 1984).

> (4) **Following the feedback, please reflect, discuss and share:**
>
> How did being involved in …
>
> • clarifying your methods …
> • presenting to/discussing with the group …
> • hearing about others' decisions …
> • and overall summing up and giving feedback …
>
> … help you in your research development at this stage?

Some responses from the group work on methods
Some students indicated cultural difference in their research approaches; others worked through their research methods to ensure they would fit their aims and conceptual frameworks. One student, concentrating on interactions and power in a school, said that discussion with others in the group enabled her to consider how different people involved in her study might interact. She realised she needed to find a way to relate their responses and consider their interactions. Recognising the different people involved and interactions necessary enabled her to focus on ways she would build together the different elements of her research methods.

The sessions have proved to be enjoyable, building peer-support culture, and also intellectually taxing. Note-taking, discussing and reporting accurately from a group process is a skill that helps students learn to present and engage in academic discussion about their own and others' work: all are transferable skills (and useful in a viva).

Students participating in the group work session reported a variety of responses. One was visibly seen to have an enlightening moment when, through relating her conceptual framework to her research methods, she could see how the whole fitted together. Both isolation and wastage could be counteracted by the sensitive development of support systems based on initial programmes of research methods training.

Data analysis workshop stage 1
A second workshop at stage 1, 'What do I do with all this data?', models problems of asking questions of data, when a great deal of data has been collected and students find they

• have collected too much and do not know how to manage it;

- have lost their sense of what questions they were asking and why;
- have become too immersed in the data to be able to work out how to problematise, question, organise, then analyse and present it.

This first stage workshop accompanies discussion on data handling and analysing findings, the managing of data through computer programs such as SPSS and NVivo, cataloguing, thematic identification, relating back to the research questions and moving towards drawing conclusions. Students are given data produced through analysing a questionnaire on their own learning (RoLI) undertaken earlier. In theory, they should be able to identify the research questions and, since we have discussed learning approaches, motivation, outcomes and so on, be able to go some way towards working out what kinds of questions can be asked of the data to make sense of the research questions. Ensuing discussions revealed several students to be at the stage Hodge (1995) calls 'negative postmodernism', that is they feel they are 'swimming in data'!

To run the workshop
Students need: A questionnaire, a data set, a pie chart and a bar chart, etc., drawn from the data, and some background information on the aims and outcomes of the questionnaire.

Data analysis exercise: What do I do with all this data?

In groups, spend 30 minutes with the data discussing these questions. Select a chair to manage the discussion and a respondent to report back on your views:

- Look through the data produced from analysis of the Reflections on Learning inventory (YOUR cohort)
- What could you do with this data?
- How do you feel when presented with such amounts of data?
- What questions would you like to ask it?
- What do you need to know FIRST in order to ask any questions or interpret anything?
- Why might you want to use this particular data? What might you be seeking?
- Why use this *kind* of data?
- What else – what other information from other research vehicles and methods might you want to use to help back up (triangulate) your findings from this data? And why?

- Now look at the information about categories.
- Can you draw any tentative conclusions; make any suggestions about interpretation or meaning from any of this? How do the categories/does the further information help your analysis and interpretation?
- How could you represent this data, and in what useful ways? Why? How might it be used to illustrate or argue? Defend your decisions.

Individual discussion and group report back

Now think individually, and then discuss in your group:
- What will you ensure you do in order to analyse and interpret your own data?
- What could go wrong?
- What kinds of precautions can you take to ensure little goes wrong in collection, analysis etc?

Now please present some good practice suggestions for managing, analysing and interpreting data.

Discussions about analysing and categorising data, producing and sharing findings, and drawing conclusions emerged from the workshop. For example, one student noted:

> Most of the people agree with it … links between movement. How can we show links? Sometimes the data that we got when collected can lead us to such assumptions that a lot of them … then we have to summarise them … select, decide which assumptions we want to research afterwards, and sometimes we have a previous assumption, and discover after we have collected data, we have a surprise – that nothing conforms to our thinking before, and we have to create absolutely new assumptions … so we need to research what's going on with our (prior) assumptions, then we collect the data … you have to check why it happens.   (Student F)

Students discuss links between their previous assumptions, the data and how they might develop findings and draw conclusions. Difficulties of showing links using qualitative methods emerged. The group felt more secure with quantitative methods.

Involvement in questionnaire completion, data analysis, discussions, and focus group discussions as part of the initial development programme encourage a focus on any gaps and disjunctions between aims and methods, causing students to reflect on getting a 'best fit' between methods, data analysis, strategies and their own research. It is hoped that they are then more able to take a reflective approach, are likely to be more open to change and more able to accommodate and respond to 'surprises' and 'creative' elements of research, as well as clashes in approach and aims (as they meet them) during their research work.

This is a PhD research development workshop, but could easily be used with students at any level. (Indeed, I have run a similar, shorter, easier version with OU Social Science Foundation preparatory course students.) Other workshops, useable at all levels, could:

1   Involve students working in groups to identify themes and categories from transcripts of taped interviews, deciding how to label, extract, then comment on these extracts in a dialogue.
2   Involve trialling dissertation schedules on each others' group participation actions, then discussing:
    • how you would categorise,
    • how you would interpret, and
    • how you would produce findings or conclusions from these in a meaningful way.
    (See Wisker, 2001a.)

Programmes can bring students together and support community building and methodology development. A two-day research development programme for postgraduates conducted at the University of the West Indies in 2009, 2010 and 2011 takes notice of current development in postgraduate student learning and supervisory practice research to include issues of academic identity (Åkerlind, 2008; McAlpine et al., 2009; McAlpine et al., in press), wellbeing and emotional resilience (Morris and Wisker, 2011), and grows from both our doctoral wellbeing and emotional resilience research funded by the ESCalate (HEA) Education subject centre (2010–2011) and from our National Teaching Fellowship Scheme (NTFS)-funded doctoral learning journeys research (2007–2010). The latter tracks the learning journey of 33 PhD students in a range of disciplines, focusing on the points at which they make learning leaps and cross conceptual thresholds, working at conceptual, critical and creative levels in their research. It also examines how and where supervisors support and nudge these developments, as well as what other events and activities can promote or nudge such developments.

Students in the programmes have said they respected the research-informed nature of the development programmes, which moves beyond tips and institutional information-giving to interactions and reflection based on research and experience.

Research development programme example: outline for a one day programme

- Welcome and introduction
- Outcomes
- From the start to the finish – looking back from the finish to the start – what are examiners looking for? What outcomes are you seeking in undertaking research?
- Planning the research project
- Getting started
- Research questions
- Conceptual frameworks
- Methodologies and methods
- Working with your supervisor(s)
- Academic identities
- Emotional resilience and the link with work – quality research development
- Working for the 'Good enough PhD' conceptual levels and doctoral learning journeys – making learning leaps
- Writing – habits, momentum, getting unstuck, developing a sound thesis
- Developing and maintaining sustainable research communities, peer support, networking
- Examination and vivas
- Presentations, publications, CVs and beyond – employment

Postgraduate research development programmes – a summary

A good RDP provides support and development to augment supervisors' work and help students develop peer group support. Additionally, it contributes to meta-learning, encouraging students to reflect on their learning, moving theories beyond the qualification, and developing transferable skills (some clearly related to research, for example, methods; others more generic, for example, time management).

Margot Pearson, considering generic programmes, suggests some common themes:

> How does the programme:
>
> - provide access to resources (and expertise) essential to conduct high-quality research?
> - give students flexibility/choice of learning and research conditions within a negotiated structure?
> - ensure adequate supervision for administrative matters and for intellectual leadership, and identify who is responsible for what?
> - ensure students engage with practising researchers and are in conversation with a community of peers/experts/others?
> - be responsive to students' career goals and the opportunities and demands of relevant employment markets?
>
> These questions cannot be usefully or effectively addressed by generic institutional-level policy formulations, or by individual supervisors alone. They require an integrated approach to curriculum design for particular conditions and purposes.   (Pearson, 1999, p. 282)

Pearson and others consider the importance of workshops and programmes, supervisory guidance, peer support systems in a framework itself reflective of institutional commitment to good practice in support and development for research (corresponding to UK Metcalfe Report – see Metcalfe et al., 2002) and which helps build a community of practice, extending research capabilities:

> The responsibility of the supervisor is to ensure that more than technique is learnt. To do this, the student needs to learn not only current practice but how to address the problematic and the unknown. Schön refers to this as 'an art of problem framing, an art of implementation, and an art of improvisation' (Schön, 1987, p. 13). In his approach, the student learns through doing and through critical reflection on that experience in conversation with experts, who can draw on their extended repertoire of skills and strategies. Similarly, in Collins et al.'s cognitive apprenticeship model, modelling, coaching and scaffolding are located within the context of students being encouraged to externalise their learning processes so that they can gain conscious access to and control of their own problem-solving strategies by articulating and reflecting on their knowledge, reasoning, or problem-solving processes and by exploring new avenues of interest to themselves.   (Pearson and Brew, 2002, p. 140)

▶ Conclusions

Completion of research and PhDs successfully is a long-term project involving students, supervisors, institutions and the academic community in ongoing developmental work. Completing a master's or undergraduate research dissertation might be less of an enormous project in terms of *time* and *length*, but coming, as they do, so much earlier in a student's research career, they appear equally daunting. In each research enterprise, students engage in a conceptualisation of the research, processes of research in action, strategies of research as a form of learning, and the tenacity, structuring and presentational capabilities that lead in the last analysis to a well-presented, well-articulated, well-conceptualised and structured piece of significant research, making a contribution to knowledge and conceptualisation in the field, at the appropriate level. In this, a great part is played by the supervisor. However, as a supervisor you are not alone. There are communities which can support students and offer advice, critical friendships in reading their work, and emotional support, which all takes place outside the more power-related supervisor–student relationship, and can provide the kind of emotional safety net which ensures not only student success on courses, but the building of collegial communities locally and internationally, after the research. Some of such communities lead to joint projects, joint publications, and some to psychological support. The supervisor might feel he or she is in a lone support position but an equally large part is played by the academic community, of which research development programmes constitute a formal part, and student peer support mechanisms, including reading groups, etc., a less formal, perhaps more personal support and development mechanism.

▶ Further reading

Aitchison, C. (2009) 'Writing Groups for Doctoral Education', *Studies in Higher Education*, 34(8), 905–16.

Davis, H., Evans, T. and Hickey, C. (2006) 'A Knowledge Based Economy Landscape: Implications for Tertiary Education and Research Training in Australia', *Journal of Higher Education Policy and Management*, 28(3), 231–44.

Emilson, U. and Johnsson, E. (2007) 'Supervision of Supervisors: On Developing Supervision in Postgraduate Education', *Higher Education Research and Development*, 26(2), 163–79.

Owler, K. A. (2010) '"Problem" to be Managed?: Completing a PhD in the Arts and Humanities', *Arts and Humanities in Higher Education*, B9, 289.

Pearson, M. and Brew, A. (2002) 'Research Training and Supervision Development', *Studies in Higher Education*, 27(2), 135–50.

11 Dealing with difference: working with different kinds of learners and learning styles

In this chapter we consider working with research as a form of learning, and how we might recognise our students' learning approaches and better enable them to be successful in their research-as-learning.

This chapter considers:

- *how our postgraduate and undergraduate students approach their research as a form of learning and what we know about their learning styles*
- *how they conceptualise their research*
- *the possible pitfalls that could arise from a mismatch between learning approaches and the demands of research*
- *threshold concepts and conceptual threshold crossing – levels of understanding and creating meaning*
- *using the research-as-learning questionnaire as a learning vehicle*
- *how to manage mismatches or dissonance between students' research-as-learning approaches and their research project.*

Autonomy, independence and originality are essential elements of successful postgraduate research outcomes, dissertations and theses. For undergraduate students, undertaking research is an opportunity for some first steps in the direction of independence and originality. Research conducted on my own Higher Education Academy National Teaching Fellowship-funded project (2005–2011), the NTFS-funded Doctoral

Learning Journeys project (2007–2010) at the University of Brighton and Anglia Ruskin University and earlier work at Anglia Ruskin University (Wisker, Robinson, Trafford, Warnes and Creighton, 2003) indicates that there is much to be learned about how research students approach their research-as-learning. The Quality Postgraduate Research conference, Adelaide, Australia (bi-annual since 1994), the International Doctoral Education Research Network meetings (tri-annual since 2007) and the Postgraduate Supervision conference, Stellenbosch, South Africa (bi-annual since 2007) are invaluable community gatherings (followed by publications) where current research and scholarship in this field of research learning and supervision is debated and developed. Insights provided by research enable us as supervisors to support students and to enable students to match research-as-learning strategies and vehicles to research questions and intended outcomes. Additionally, potential dissonance between learning styles, learning approaches and intended learning outcomes can be identified. If students can develop a diversity of research-as-learning approaches, closing gaps between their approaches and conceptions of research, and their intended outcomes, they should achieve greater success in their research. Our recent work on conceptual threshold crossing (Wisker, 2010; Kiley and Wisker, 2008, 2009, 2010; Wisker and Robinson, 2009) explores the 'learning leaps' students make as they engage with their research at conceptual, critical and creative levels, achieving deep understanding and constructing new knowledge, at different stages in their research journeys.

When research students start their work, whether for a dissertation or for a PhD, they are making a great leap upwards into a more complex and demanding level of learning, just as they did when starting a degree, or the work that preceded that. It is, therefore, very useful to find out more about the learning demands of the research-as-learning, and about students' own preferred learning styles, strategies and approaches in relation to those demands. In this way, supervisors and students can recognise developmental learning and research needs together, and supervisors will be less likely to expect students to learn in ways with which they are familiar. This is particularly important when working with students from other learning cultures.

Research into student learning deals with human subjects, their reflection and experience. It also deals with specific interactions. Students might well learn differently in different contexts or following different cues from staff and the curriculum.

▶ **Potential difficulties in research-as-learning styles and approaches**

Students should be encouraged to be reflective about their own learning styles, preconceptions and approaches so that they can develop meta-learning, to acquire the research-as-learning practices needed by the research questions, methods and tasks in hand. You might ask your research students to consider:

- Why they carry out learning and research, that is, what motivates them (parental examples, a sense of duty, a sense of fulfilment?)
- How they conceptualise their learning – are they seeing learning as accumulating more knowledge about the world or enabling them to fit new understanding into a conceptual framework and link to experience?
- What kinds of learning and research approaches they take – whether they are accumulating information and data, and/or relating ideas, theories and information holistically
- What sort of outcomes they seek, for example, gaining status, seeing the world differently, bringing about creative change.

See Meyer and Boulton-Lewis (1997) in relation to postgraduate learning, Meyer and Kiley (1998) and Wisker (1999) for further thoughts on this linking between conceptions of research as learning, motivation, sought outcomes, and ways of going about the research as learning. All of this should be useful when considering the different ways in which our students learn, their different outcomes and motivation, and those beliefs and practices we hold ourselves, so that matching supervisor–student interactions with respect and support is achieved.

It is interesting to clarify these issues and practices for several reasons. Learning as a postgraduate or as a research student makes new and different demands upon students, and they therefore need to develop further learning strategies to succeed. For international students, culturally influenced learning expectations and behaviours might differ in their research university from those at home. An increased awareness of diverse learning approaches and the demands on learning development made by research studies can lead to the development of an appropriate diversity of learning approaches and behaviours suitable for any level of research. This could include a focus on reflection; integrating new learning with established learning; combining different learning practices from a range of subject areas to address interdisciplinary research; and learning how to rely on sound evidence for the learner's learning to ensure research questions, the conduct of the research,

and conclusions are carefully founded in and underpinned by theory. Equally, students need to ensure that if they rely on activity and experience, it too is underpinned by theory. Research into student learning (Marton and Saljo, 1976; Entwistle and Ramsden, 1983) suggests that students broadly take one or more of *three* approaches to their learning (i.e., 'deep', 'surface' and 'strategic' learning).

▶ Learning styles: deep, surface and strategic learning

Established research into student learning initially identified two main learning styles: deep and surface learning (Marton and Saljo, 1976, Ramsden 1979), to which was added latterly 'strategic' learning (Entwistle and Ramsden, 1983). It is suggested that 'traditional or didactic teaching' largely encourages *surface* learning and that this could be present in science subjects in particular, where there is a large information base. Their work preceded much research into culturally inflected learning, but it is also latterly suggested that some culturally inflected learning styles privilege learning which reproduces knowledge, probably in deference to authorities, and that this too leads to surface learning characterised in some cases by memorisation before understanding. This view of learning from cultures which are not Western European, North American or Australasian can seem a form of cultural imperialism which prioritises some forms of culturally inflected learning over others.

Another view of this is that learning required for research necessarily involves critical thinking, conceptualisation, challenging and problematising given knowledge, so that new knowledge and interpretations can be constructed, and that some educational practice enables students to develop the appropriate skills early on, while for others it is important that they be guided to develop those skills once they undertake research. In terms of these learning theories, *deep* learning is seen to produce better results and longer lasting learning for the students, that is, learning is likely to be internalised, as it integrates theory and experience, and new learning is linked to established learning. It is also more appropriate for research endeavours, particularly for postgraduates, because deep learning depends on asking critical questions, problematising given beliefs and interpretations, seeking new syntheses, as well as being creative and original based on understanding, questioning and expressing questions or solutions in new ways. Students tend to adopt a variety of approaches, partly dependent on experience and partly on the cues offered by staff or the learning situation.

The *surface* or *atomistic learner* tends to see knowledge as the acquisition of facts or information. Tasks and objectives are seen as discrete, as are the stages towards completion of a task. Time is very important, as is completion. A personal relationship or identification with the work is considered inappropriate and even misguided. This kind of approach relies a great deal on learning as 'memorising before understanding' (Meyer and Shanahan, 2002). Because students are not uniting ideas and facts, they find themselves unable to fit new information and ideas into already developed learning or concept 'maps', and into a relationship with their own experience. Such learning tends to be easily forgotten, little used. Researchers taking surface approaches will tend to accumulate vast amounts of information and data but are unlikely to marshal it towards addressing their research questions or contributing towards an ongoing argument.

The *deep* or *holistic learner* searches for meaning lying beyond or within specific tasks. They relate any discrete information to a general, already established learning or concept map, relate new ideas and learning to prior experience and prior learning, and develop as new information and ideas are added. They tend to personalise learning tasks and integrate them. They see the whole problem, the general ideas, the main concept, and fit the learning activity into these through using frames of understanding and personal experiential reference. They problematise what's offered up as given and so ask questions and make meaning. Such learning is more consistent with research insofar as it encourages problematising and problem-solving, creativity, the development of new ideas and concepts, and a concern with the longer-term usefulness of the research findings.

Strategic learners focus on the end product – the marks – with the main aim being to pass or to achieve the completion of a dissertation or thesis. Students could 'grade chase' and only learn what appears necessary, thus lacking linking and retention.

Research students certainly need to have a clear vision of the end product – the dissertation or thesis. To achieve this, they need to accumulate data and information as evidence, but they also need to select and relate it to their research question, the gap of knowledge they seek to address and the boundaries to their research. They fit information into concept maps, and if they memorise it, it is only after they have understood and sought meaning. They are strategic in the sense that they do not want to be overloaded with excessive, unnecessary detail and do need to direct their research and orient it towards completion in time. It could be argued that the successful research student combines a deep and a strategic approach, knowing how to acquire and manage data, information, evidence and arguments into a coherent, completed whole: the dissertation or thesis.

▶ **How research-as-learning might differ in different disciplines**

Different disciplines and different parts of disciplines might be taught in ways that encourage either surface or deep learning. Ramsden (1979) indicates that students can switch strategies to suit tasks. Biggs (1978) shows that while students might evidence tendencies for different sorts of learning, it is *both possible and desirable to encourage the development of deep learning approaches* because these are overall the most successful learning approaches to embed and use learning. The depth of processing learning implies meaningfulness in learning. This is particularly important in relation to research-as-learning, since fundamental elements of the research process relate to enquiry, problematising, relating experience to theory and to practice and contributing new knowledge, none of which would easily be accomplished by the regurgitation of memorised, discrete items of information.

A deep learning strategy, based on wide reading, relating new knowledge in comparison to what is already known, results in better or deeper learning. This is defined as complexity of outcomes (Biggs, 1978; Marton and Saljo 1976), satisfaction with performance (Biggs, 1978, chapter 6) and reflected and self-rated performance in comparison with peers or examination results (Schmeck, 1986; Svensson, 1978; Thomas and Bain, 1982, Watkins and Hattie, 1981).

Science students are probably more likely to adopt an approach which favours testing and proof, the acquisition of proven facts, characteristics of the surface approach, and many subjects tend to call for surface or accumulated learning, at least as part of acquiring a knowledge base. My own discussions and interviews with postdoctoral scientists and supervisors ('parallel project' 2003–2010) takes us beyond the somewhat simplified dichotomy of deep and surface learning, however, as science supervisors indicate that the problematising of given knowledge takes place at the start of much scientific research, and researchers are likely to be creating new knowledge following the revelations in and interpretation of the data from experiments whether successful or failed. Whatever the discipline, the accumulation of data and evidence should be placed in a frame, in relation to research questions and arguments, leading to understanding. Research carried out by Svensson (1978) suggests, in relation to undergraduates, that those who learn to adopt a deep approach gain better exam results in the end and also become better learners. This would appear to be even more relevant at postgraduate level because of the need for reflection, creativity and ownership of the individual research project.

In all subjects there is an element that is information-heavy and requires some memorising so the students can, at will, use what they have encoded in their memory.

All subjects require data and evidence. The clue is mapping these against the research question, showing links, synthesising and adding to knowledge, rather than simply regurgitating knowledge.

Learners who contextualise their learning relate it to themselves and their own world. They become reflective, self-aware and more flexible. They concentrate on how they are learning as well as what they are learning (meta-learning). They are likely to be higher achievers than those who are less aware of or consider irrelevant such consciousness and contextualisation. In terms of research undertakings, students who get stuck at the level of accumulating vast amounts of data might feel they are working hard but getting nowhere. It is the synthesising, organising, sifting and directing of information or asking questions and trying to answer them that makes it a research endeavour, and creates meaningful learning.

Recent work focuses on trans- and multidisciplinary research, arguing that 'Deep discipline-based research is essential but not sufficient to address the complex issues that arise in modern society: we need interdisciplinary (ID) and transdisciplinary (TD) research also.' Because it can combine theories and 'generates knowledge and insights from different disciplinary frames with a practical, problem solving intent'. It values 'emergence and change, includes lay knowledge, encourages values to be made explicit and allows for disciplinary knowledge to be questioned from other disciplinary perspectives' (Mitchell, 2010). While we might normally supervise within our own discipline comfort zone, supervising multi- and transdisciplinary research will inevitably cause us to question the approaches we have taken for granted, the knowledge construction and even the articulation in written papers, dissertations and theses.

Students' approaches may differ at different times and in different learning situations. One influence may be a diversity of learning cues from supervisors. Learning relates closely to the way in which students see the world, to their reasons for undertaking research and the kinds of outcomes sought. It is useful to discuss with students why they are researching, how they conceptualise their research, how they go about it, what outcomes they seek and what skills they are developing. Some problems could be overcome by developing this kind of reflection and interaction. Our research into postgraduate learning, for example, shows a direct correlation between research students taking a largely accumulative approach and a lack of progress. Therefore, if students find they are largely taking a surface, accumulative approach, they could be left with large quantities of disparate data and little

developed idea about how to fit it all together, or make meaning from it. This will lead to problems in both the progress and the quality of the research.

Consider the case of one researcher, Alan:

> When I took early retirement I knew exactly what piece of research I wanted to carry out. No-one to date had actually looked at a history of the company, and I think this is an important piece of work, to chart the company's history, looking at what it has achieved, the various setbacks and the successes. I have not had any problem gaining access to documents I need for my research, and I have looked back now over documents since the late nineteen forties when the company was first established. I work very systematically. I colour code the different issues and the different themes and ensure that they are all fully written up and labelled on my computer so that I can access any piece of data under whichever cross-referenced headings I am using at the push of a button. I also work very systematically. I mean now I have retired this is the main task I am involved in, so I get up each day and do about five hours a day on the thesis.

Alan is clearly an accumulative learner. He gathers facts and carefully stores them. Many of these strategies are admirable – he is well organised. But his work lacks any sense of problematising, questioning, wondering why? Why not? It is unlikely to be at PhD level, rather at MPhil, *because* of this approach. If we were working with Alan it would be important to offer opportunities to see contestations of what seem to be received knowledge and fact, to offer reading which indicates that even history is constructed, and is based on ways of identifying, approaching and dealing with problems. So it might be possible to 'nudge' Alan towards asking questions about reasons for the decisions made in the company in its progress and thus move beyond the recording of historical facts to asking why?, and to what effect? – questions which recognise that all knowledge is situated.

There are many theories of learning styles (for example, Honey and Mumford, 1986; Kolb, 1984; Schön, 1983). For research students, spotting their own learning styles or approaches can help them understand why they might find it easy or difficult to learn from some situations and in some contexts. A useful learning activity to encourage is the development of reflection and meta-learning, that is, students' awareness of how they are learning. This can partly be encouraged through involvement in reflective activities of completion, discussion of results from learning questionnaires and through keeping a reflective log. There is growing interest in encouraging students to recognise the research skills they have acquired and devel-

oped, perhaps evidencing these in a personal development portfolio; both log and portfolio are activities to prompt deep learning.

▶ **Reflection and metalearning**

When students have such knowledge about their own learning, they can choose to play to their strengths and/or to work on their weaknesses and develop further the learning styles and approaches that are not the most obviously successful for them, especially in terms of learning demanded by different elements of the research. They will need to brainstorm crucial, central ideas, problematise given interpretations, collect and categorise data, manage it, interpret findings and write up a coherent, well-argued dissertation or thesis.

You could work with your research students to complete the Reflections on Learning Inventory (Meyer and Boulton-Lewis, 1997), or another learning styles inventory/questionnaire, such as the Approaches to Study Inventory (Entwistle and Ramsden, 1983) or the Honey and Mumford (1986) learning styles questionnaire (which focuses on occupational learning), and then discuss the results in terms of research-as-learning. These are all attempts to describe variety rather than fixed categories. Two activities follow to help supervisors and students to consider which of the four main styles describe their way of learning and then to reflect on the forms of learning demanded by their research processes.

Activity: for supervisors and students

Please consider this version of Honey and Mumford's definitions of learning styles. If you want to complete their questionnaire and analyse your results for a more 'accurate' picture, it is readily available in their book *Using Your Manual of Learning Styles* (1986).

Learning styles
Each style has its own strengths and weaknesses. There are no 'good' or 'bad' styles. Your major styles will tell you what strengths you have as a learner, which situations and learning activities make it easier for you to learn and what you need to be wary of or to develop in your learning styles to benefit from different learning opportunities and situations. For example, studying tourism will tend to favour activists and English literature will tend to suit reflectors.

The greatest variety of learning opportunities are available to those who can, to some extent, operate in all styles, but who are clear, when facing a problem or learning opportunity, which style is most effective for them, and which they need to develop.

Activists
Activists learn best from constant exposure to new experiences. They like to involve themselves in immediate experiences and are enthusiastic about anything new. They tend to act first and consider the consequences later. They enjoy new challenges, but are soon bored with implementation and consolidation. They learn least well from activities that require them to take a passive role. *As researchers*, they might be excited by experiences or interviews, experiments and fieldwork, but not so keen on reading the underpinning theorists or working solidly to write up their work to completion.

Reflectors
Reflectors learn best from activities that allow them space to consider experience and assimilate new information before making a considered judgement in their own time. They tend to be cautious and thoughtful, wishing to consider all the possible angles and implications before making a decision. They often spend a good deal of time listening and observing. They learn least well from activities that require rapid action with little time for planning. *As researchers*, they might need some support in 'doing', for example, experimentation or performance of field tasks and data collection, but they should be good at considering the implications of research results and what they are learning through conducting and writing up research.

Theorists
Theorists learn best from activities that allow them to integrate observations into logically sound theories. They like to think problems through in a step-by-step way, assimilating new information and experience into a tidy, rational scheme. They enjoy reading and theorising, are good at analysis, and comfortable using theories and models to explain things to themselves and others. They are less comfortable with subjective opinion or creative thinking. They learn least from situations that they are unable to *research* in depth. Theorists are usually very likely to involve themselves in the reading but might find they read themselves into stagnation. Conversely, they struggle to carry out experiments, interviews, observations, or to try to draw even factual conclusions. They might need prompting to conduct fieldwork or experiments and to assimilate field-

work data, to start to write, and actually commit themselves to arguments (rather than planning and theorising alone).

Pragmatists
Pragmatists learn best from activities that have a clear practical value and that allow ideas and approaches to be tested in practical settings. They tend to be down-to-earth people who like to get on with things. They also tend to be impatient with open-ended discussions. They learn least from situations where learning is not related to an immediate purpose. To some extent they can make really sound researchers, as they tend both to carry out the theoretical work – reading, in dialogue – and to engage with practical data collection and analysing. They might be better off produc-ing *research reports*, that is, 'useful' outcomes, rather than creating new knowledge or working at a deeply conceptual level. For a PhD piece of research rather than a practical research project, they might need support in terms of learning to draw conceptual and factual conclusions instead of developing change programmes and recommendations, where change recommendations are actually *not* appropriate to the research design.

Activities to stretch and develop research-as-learning styles

With mutual agreement and planned development – if your student 'presents' as a high *theorist* – you might suggest he or she: (1) carefully read one of the key essays related to his or her research; (2) critically evaluate how it makes an argued and well-evidenced case; (3) apply the theories or arguments *directly* to part of his or her own research sample, field and data.

If students present as high *reflectors*, the same kind of strategy is useful, or any which encourages active engagement with research, building on reading and reflecting.

If students present as *pragmatists* or *activists*, ask them: (1) to gather three extracts dealing with theory and argument from other researchers and theo-rists related to their work; (2) to process these and then present them, showing directly how these ideas and theories underpin the work; and (3) to link questions, methods, data and findings directly to the theories. This analysis should help to act as a model for their own work, where they will need to engage *their* ideas and findings with the theories and previous work that underpin it.

If students present as *activists*, ask them to keep a reflective log of ques-tions, problems, reading and achievements in their research processes, and look at it with them, asking them to make links between the log, their actions and findings.

By definition, research students need to be self-directed learners for much of their time. A consideration of the adult learning-based learning theories of self-directed learning (Brookfield, 1986), experiential learning (Kolb, 1984) and reflective practice (Schön, 1987) can benefit students in their appreciation of their own learning styles and approaches, and the demands of the research process. As with the theories about research-as-learning (above), it could be useful to encourage students' meta-learning and development of a repertoire of research-as-learning strategies. Suggest they read work by learning theorists, reflecting on it in relation to their current practice and the requirements of the research process.

These related theories and practices (as discussed above) feed into basic assumptions and guidelines underlying success in learning, in the setting up of learning experiences and the monitoring, evaluating and evidencing of learning (see Wisker, 2001b, pp. 86–101).

It is possible to map learning approach theories onto the stages of students' research and the methodologies and methods they might use. In very simplistic fashion – *Inductive research* builds theory, while *Deductive research* tests theory. *Inductive research* is more likely to start Kolb's experiential cycle with the experience, then produce a research question, build up theory, explore and investigate it in practice, ask questions, then develop theory. *Deductive research* is more likely to begin with a hypothesis and some assumptions to be tested, build the research and test the hypothesis, modifying it when the results appear, and mapping what is being discovered against the underpinning theories.

If they consider their place on Kolb's (1984) learning cycle in relation to their specific piece of research, this could help students to identify whether their work is inductive, deductive or a mixture, and relate this to their learning strategies. This insight can lead them to develop clearer ideas about the necessary research methods to use in order to ask their research questions, test their hypotheses, or ask their research question and approach their research problems. Beyond the research, students can continue to put findings into practice to cause change, reflect on the effects, research the effectiveness, and continue with their enquiring, their research and their practice, while also sharing their findings with others.

▶ Reflective practice

Reflection helps to clarify and embed learning. In *The Reflective Practitioner*, Donald Schön (1983) explores how professionals and practitioners learn from experience. He argues that professionals respond to and reflect on

varied experience arising in their work, seeking development and change. Reflective practitioners use 'artistry' in creative ways to draw from a set of past examples and precedents and continually transfer from one situation to the next. They create and learn anew in each situation, bringing previous learning to bear on new situations. This relates to research in several ways. Professional work and practice generate experience and knowledge naturally, but it is important to make this learning explicit in a learning situation, and to encourage learners to reflect on and articulate their learning from practice and from their work (see Winter, 1993). Students who are building on research for reflective practice will need to draw from professional work and practise the learning experiences that relate to the research they are undertaking. Reflective practice often inspires practitioners to carry out practice-based, professional or action research so it naturally informs and underpins some kinds of research questions, methodologies and methods. However, all students can benefit from using reflection to be aware of research skills and to develop their research decisions and discussions and findings based on reflection. Students should be encouraged to be reflective about their research practice and learn from this (use a log, a journal, or discuss it with their supervisor).

Supervisors and students could consider the beginning and the progress of the research around Kolb's (1984) experiential learning cycle, to see how and where they might enter the cycle and how their research progress can be changed by working out how they move through it.

First let us consider the research topic and proposed methods. Could there be any moments of contradiction or potential clash? Could any particular research-as-learning approaches be less fruitful or suitable than others?

Clashes between approaches and the outcomes the student is seeking are likely to take place, for example, when students:

1   adopt a largely accumulation approach but seek a transformative outcome;
2   are overwhelmed with details and data and cannot easily order or map them.

Our research with PhD students at Anglia Ruskin University (1998–2003) used questionnaires (Reflections on Learning Inventory, Meyer and Boulton-Lewis, 1997), supervisory dialogues, interviews, workshops and focus groups to identify and then work with students to overcome problems in their research learning. It is useful to consider potential clashes, limits and blockages, and talk through with your students about how they might more appropriately develop research proposals; temper their transformational aims to

be more realistic and realisable within the size and scope of a PhD, MPhil, EdD, MA, BA, BSc etc.; match research methods to the intended outcomes; and avoid overload in terms of the amount of research to be undertaken.

A PhD should be a manageable, do-able project rather than a lifelong, world shattering piece of research (although it might also be world shattering and should create new knowledge). Many supervisors see it as a journeyman piece of work where students engage with a large (enough) research project, develop research skills, and see the process through effectively from ideas, through hard focused work, to completing and finishing, then learn from the whole organisational, discovery and writing experience. They take their learning into their practice and into future research. If students can be encouraged to see it as a manageable project, as well as challenging, onerous, enjoyable and a major achievement affecting identity, they are more likely to be able to see through and beyond the project, manage the process, not be overwhelmed by it, and use the learning – *How to* as well as *What* – later. Reflection helps with this process.

▶ **Postgraduate research-as-learning questions**

You could find it useful to complete the questionnaire for yourself first, then ask students to complete it, and use it in discussions with them. Consider what the implications are for the student's research-as-learning success, and what might be done to make the student aware of any misconceptions in the design of the study, any mismatches between research-as-learning approaches and the research itself.

The questions are designed to help to prompt reflection about the *appropriateness* of research-as-learning conceptions and approaches in relation to approaches and conceptions with which the supervisor and student might be most familiar, and in relation to the proposed research project. Some of the most familiar conceptions and approaches might differ between supervisor and student, or might not actually be suitable for the current research project, in which case discussion and development should follow and approaches and conceptions should be adjusted. Such discussions aid meta-learning.

Ask your student:

• What are your main research questions?
• What are you hoping to find out?
• What is your research concerned with/about? What conceptions of research do you have?

• In carrying out your research, which of these descriptions better describe your activities?
  Please score them from:
  1: 'this does not describe my approaches and activities', to
  5: 'this describes my approaches and activities clearly'.

Research-as-learning questionnaire

I believe my research is about/is concerned with:

1   Describing and informing – finding out information   1 2 3 4 5
     about a process or event, finding facts and results.
     Finding relations between variables or finding out
     about a situation and carefully describing it/them
     in detail.

2   Exploring – looking for reasons why certain things   1 2 3 4 5
     have happened and what might have caused
     problems/developments/situations.

3   Finding the right answers – if there is enough   1 2 3 4 5
     exploration and recording, there will be answers
     discoverable to important questions that can then
     be recorded.

4   Experimenting – starting with a hypothesis, trying   1 2 3 4 5
     out a process, a test, an experiment, some activity,
     and seeing what happens next, looking at the
     results and linking them back to the experiment,
     confirming, contradicting or modifying the
     hypothesis.

5   Prediction – predicting the links from things, events   1 2 3 4 5
     and reactions in the past which are similar to your
     area of research, or setting up conditions and
     activities and speculating and predicting about
     what could happen in the future.

6   Interpretative and constructive – understanding and   1 2 3 4 5
     new knowledge are achieved through questioning
     given interpretations, exploring and theorising,
     linking evidence to claims and producing
     interpretations, constructing knowledge and
     meaning.

7	Weaving, interrelating – believing that aspects of areas are related distantly or closely to others, even across discipline areas, and finding out about these links and overlaps to reveal interactions and influences.	1 2 3 4 5
8	Metaphorical links/leaps – using metaphors/ creative comparisons and visualisation to connect between the imaginative and the real, across disciplines, in order to spot relations and similarities. Making imaginative or philosophical mental leaps across areas that seem unrelated, to show new interpretations and illuminations.	1 2 3 4 5
9	Challenging and taking risks – challenging received views and interpretations, contesting knowledge, taking risks and learning from the surprises, mistakes and new knowledge.	1 2 3 4 5
10	Being creative – trying out a new activity or change mechanisms, exploring 'what happens if …?' and producing something original and creative, or helping others to produce something original and creative, which is also theorised and communicable to others. Pushing forward the boundaries of creativity and making something new.	1 2 3 4 5

Students might pick more than one of those above, and then we can ask them to consider how their conceptions of research fit or suit their question and their chosen methodology and methods. Different conceptions of research will be more suitable for some kinds of research and questions than others, so the main *issue* here is matching the conceptions to the questions, subject area and methodologies and methods, rather than any suggestion that there's a final 'good way' and 'right conception'.

Scientific researchers who use experiments to test hypotheses might believe there are discoverable, provable 'right answers' (3 and 4) and they are also likely to engage with challenges and risks (9), since from these come new surprising results, and from mistakes and failed work come new under-standing, questions and hypotheses. A discussion could follow about how they handle the likelihood of their experiments consistently failing and how they learn to persist and sometimes to accept that experiments don't work or can't produce 'right answers', and what is learned from this.

Social scientists, educationalists or health-related researchers might need

to predict links (5), describe relations at some point in their work (1), explore reasons for actions (2), and make interpretations of the facts, events, and their data (6). These conceptions and practices are unlikely to suit Arts and Humanities researchers, who might make more metaphorical learning 'leaps' (8), and some will create (10) while others, engaged in working with archival sources, could be more interpretative (6).

All researchers can probably see themselves as creative (9) at some point, and all challenge received knowledge to some extent. A discussion about what this *means* in different discipline areas, and in this specific piece of research, is most usefully prompted after completing the questionnaire. Students also need to realise that *all* research includes *taking risks* – they learn from them, push the boundaries of knowledge and their ways of seeing the world (and they might have to deal with resulting problems and surprises).

This research-as-learning questionnaire has been a useful aid in action research with groups of postgraduates at Anglia Ruskin University, and supervisors on development programmes. It is now further developed following this use.

Reflection on learning and research-as-learning should feed into insights and practice:

• when planning and carrying out research, analysing findings, etc;
• when reflecting on the programme of the research;
• when diagnosing and coping with contradictions and problems – getting stuck in some parts of research where this relates to how a researcher goes about it as a learning activity;
• when researching the learning of those the researcher works with or teaches.

► **Further reading**

Brookfield, S. D. (1986) *Understanding and Facilitating Adult Learning: Comprehensive Analysis of Principles and Effective Practices* (Milton Keynes: Open University Press).

Entwistle, N. J. and Ramsden, P. (1983) *Understanding Student Learning* (London: Croom Helm).

Honey, P. and Mumford, A. (1986) *Using Your Manual of Learning Styles* (London: Peter Honey Publications).

Meyer, J. H. F. and Boulton-Lewis, G. M. (1997) 'Reflections on Learning Inventory (ROLI)', questionnaire (available from J. H. F. Meyer, Department of Education, University of Durham).

Mitchell, C. (2010) 'Co-creating new guidance materials for supervising inter-
and transdisciplinary postgraduate research students', QPR extended
abstract at: http://cedam.anu.edu.au/sites/default/files/people/dr-margaret
kiley/QPR2010_Proceedings.pdf#page=95

Schön, D. (1983) *The Reflective Practitioner* (New York: Basic Books).

Winter, R. (1993) 'Continuity and Progression Assessment Vocabularies for
Higher Education', unpublished research report data (Chelmsford: Anglia
Polytechnic University Faculty of Health and Social Work).

Wisker, G. (2010) 'The good enough doctorate: Doctoral learning journeys',
Acta Academica Supplementum, 1, pp. 223–42, at: www.ufs.ac.za/
journals_ActaAcademica.

12 Supervising international and culturally diverse students: cross-cultural issues

As the importance of global citizenship and the richness of cultural difference are increasingly recognised in Higher Education, so too is ensuring that the supervision of culturally diverse and international students is a mutually enriching process, leading to successful outcomes and international research-capacity building. Growing numbers of postgraduate and under-graduate students are studying at universities outside their own country in a variety of modes, either on site, at a distance, or a mixture of both.

Historically, there are exchanges, most often between Northern hemi-sphere Western universities, while Southern hemisphere students, including those from the Near, Middle, Far Eastern and African countries take courses and undertake research at European, Australian and American universities, which follow Western, Northern models of university structure, awards, learning, teaching and assessment. However, students are very mobile and are no longer attracted merely to historically Western contexts to study and research. For example, mainland Chinese students are studying in Hong Kong and Singapore, and African students are studying in Malaysia. Nor can we assume that the supervisors are from the host institutions' country and that students are likely to be expected to assimilate a single, culturally inflected set of learning and research practices. In my work with supervisors, I have met students from many different origins studying with equally inter-national and culturally diverse supervisors, in the cultural context of the university, and increasingly seeing themselves as part of a global research community. Researchers and supervisors are mobile, especially scientists and medical professionals, and at any university's international, multicul-tural faculty, are likely to be supervising across a wide cultural range of students.

International students are also big business for Northern and Western universities, who often rely on their income for survival, yet sometimes struggle to change university practices in response to difference. Talking about and theorising practices and experiences based in cultural difference necessitates the use of postcolonial theories and those of power, economics and diversity, all of which have their own complex discourses and potential stumbling blocks for political correctness. I apologise in advance for inadvertently upsetting readers, but I do not apologise for bringing up some uncomfortable truths. Despite the politics and economics, at the heart of the supervisor–student research experience are people, and I believe our role as supervisors is encouraging and enabling or 'nudging' the best learning and research through humane, enabling, empowering, intellectually challenging, just and sensitive supervisory relationships, in context. This chapter explores some of the issues which supervision of international and culturally diverse students might present for supervisors of different cultures from that of the student, making research and experience-based suggestions for good pedagogical and other practices.

This chapter considers:

- *international and culturally diverse students – cultural learning issues*
- *institutional contexts, practices and supervisory support*
- *internationalising the curriculum*
- *managing issues of cultural difference in terms of preconceptions, learning, interpretation, social and research issues*

Research and researchers are very mobile. We live in increasingly multicultural societies and a world where travel and communication enable us to move, mix, communicate with each other, and live and work in each other's countries with what sometimes seems effortless ease. However, this ease of travel and technology mask continuing difficulties experienced within cultural contexts. If international students are to benefit fully from studying in cultural contexts other than their own, and if the universities that host and work with them are to gain some benefit from the presence of international postgraduates and undergraduates, we need to share good practice to facilitate real interaction as opposed to some form of travel and technology hype. It is crucial that all academic contexts enable students to achieve and negotiate carefully the cultural minefields of potential academic imperialism. Writing for the ESCalate (Education) subject centre, Sheila Trahar (2011)

tackles the tensions in the position of, for example, Gannon (2009, p. 71), who sees categories such as race, ethnicity and culture as 'deeply mutable constructs', and suggests instead that they are in constant deconstruction, reconstruction and flux. This is in reaction to Catherine Manathunga's position that a 'liberal disavowal of difference' (Manathunga, 2007, p. 95) falls short of recognising students' cultural differences, which are important parts of culturally inflected identities. Trahar comments that 'she draws attention to the desirability of pedagogy that is respectful and inclusive, that celebrates the diversity of the academic traditions that we encounter, viewing them as rich opportunities to learn about each other rather than seeking to assimilate those from different cultural contexts into "our" ways of doing things, whatever they may be' (2011, p. 5). Trahar's own publication offers the opportunity for postgraduates to tell their own stories. To some extent this is also enabled here by including comments made in interview from our own international, culturally diverse PhD students.

In some instances, unfortunately, the very form of academic writing itself takes away the voice of the students and supervisor.

Some of the assimilation of which Trahar, Manathunga and others speak is, of course, innocent in intent and part of an attempt to enable students to become enculturated into the discourse and practice of research learning which might support them in their research journeys in the context in which they are studying. An often accidental imperialism, where it exists, is reflected at one extreme in cultural arrogance, an assumption of cultural and academic superiority of ways of going about research, of who holds the knowledge and how one might access and work with it, and discourses of power in the supervisor–university-student relationship, all affected by cultural differences. At the other end of the continuum there can be a lack of attention to often basic needs – money, family, food, warmth, housing, access to communication, access to computers and libraries and work – which could be barriers to concentration and study for international students. However, supervisors and students interviewed in our recent research considering cross-cultural supervision (2008–2010) echo those interviewed during the parallel project (2007–2011) in commending the mutually enriching experience of working across cultures, sharing different culturally inflected modes of knowledge construction and perceptions of their world, and research issues, and learning about culturally inflected learning approaches and behaviours.

Embarking upon postgraduate research is an investment in terms of time, money and self-development. Students from different cultural contexts may view this enterprise in different ways from those from indigenous Western contexts. Their learning backgrounds and previous experience, as well as the

conditions in which they are researching, may be different. In addition, their approaches, the outcomes they seek, and their sense of the appropriateness of various research methods might all differ from those of the host university. If students have recently moved away from their home country to study, they might also encounter cultural differences that exacerbate difficulties in settling into another culture. Potential difficulties need to be taken into account when we set up research and training programmes, and supervisory relationships. Catherine Manathunga talks of 'contact zones' where supervisors and postgraduates from different cultures interact and learn about each other's learning and research practices as they work together (2007, p. 93). Some of the research and practice discussed in this chapter comments about coping with the potentially fraught issues and successful practice for interacting in these contact zones, ultimately suggesting practices which can enable research learning and interactions which are mutually developmental and enable agency.

Since the mid-1990s, there has been an increasing emphasis on the 'internationalisation' of higher education (Green, 1996), described in Australia as an 'export commodity' (Adam, 1995, cited in Green, 1996, p. 1). In Australia, culturally and linguistically diverse students are now thought to comprise 'up to one-quarter of the university population in some states' (Reid, 1996). In my ex-university, over 23 per cent of the students are international in origin. Increasingly, UK and Australasian universities are depending on international students for their income and solvency, and it has been calculated that 30 per cent of the income to Australian universities is generated by international student fees. Economic downturns, such as the 2009–10 recession in the US and Europe, and lack of tolerance towards cultural difference, which led to attacks on Indian students in Sydney, can all affect the attractiveness and the often shaky financial situation of universities in the UK, US and Australasia, as they seek to maintain international student numbers. One response to the increasing numbers of international students is to embrace internationalism in the university and in curricula.

The presence of international students is not the only contributory factor to internationalising universities' curricula to reflect international contexts and concerns. 'Internationalising the curriculum' suggests introducing international perspectives on subjects, rather than a UK, US or Australian view. It involves an expression of the cultural experiences and conceptualisation of knowledge for *all* students, since many will, in effect, end up working in international contexts (see Freckleton, Creighton and Wisker, 2003). Supervisors need to be aware that their international students bring with them both culturally influenced ways of undertaking research and culturally influenced constructions of knowledge. It is incumbent on supervisors not

merely to tolerate these but to learn from them and, where possible, share them with indigenous and Western students, who could benefit from skills in culturally influenced research. Free interchange of research processes and knowledge constructions could lead to a fruitful internationalising of all students' experiences. Recent symposia at the Quality in Postgraduate Research conference in 2008 and 2010 have focused on working with culturally diverse postgraduate students. Research which informed the papers delivered there and at the International Consortium for Educational Development (ICED) conference in 2010 underpins suggestions developed in this chapter.

▶ Australian and UK issues and practices: language, power and provision

In our work with students from different cultures from our own, and especially those negotiating living and working in our home institutions, miles away from their own countries, a number of issues arise which involve both professional and personal issues. For some students, the culture shock of working in a different cultural context can be overwhelming and can seriously undermine their ability to settle in and get on with high-level research work for their doctorate or master's degrees. For some, there is a need to negotiate between culturally inflected ways of constructing knowledge, modes of learning and researching, and even the culturally inflected area of work with which they are engaged, and what is acceptable in the host university.

In an early publication, 'Good Practice Working with International Students' (Wisker, 2001a), I gathered a number of examples of colleagues engaged with supervision of international postgraduates, and considering the personal, professional, learning and institutional issues. Our recent work takes that a stage further, with interviews with postgraduates and supervisors. Kisane Slaney reports on an Australian example of supporting international research students (Slaney, 1999). Curtin University of Technology attracts growing numbers of international postgraduates and undergraduates. Strategic planning initiatives prioritise the increase of numbers of postgraduates to a total of '15 per cent of the student body' (Parker, Kirkpatrick and Slaney, 1996, p. 1). Curtin is probably typical of a number of UK and Australasian universities that aim to maintain a high profile in the student 'market'. In some Australian universities, the international student population overall has now risen to 30 per cent, so that economic viability of universities relies on appropriate provision for international students, and on

their passing information of good experiences back home to others thinking of coming to a particular university. Websites are also becoming more important, as they are the first place for finding out about content, location, atmosphere, provision and, if possible, accommodating behaviours. At the University of Cambridge in the UK, international postgraduates get in touch with the online accommodation office and into a dialogue with potential landlords well in advance. On arrival, they are not only inducted into their department but often into a college, as many are assigned both to a discipline-based department of their research, and also to a college. College culture is welcoming and there are a myriad of social events at which they can make friends and research links. For science postgraduates working in a lab with others, it is a much less alienating experience than for the humanities postgraduates, who are more likely to be working in a library, alone, except for their supervisions. Some institutions have taken the nurturing hierarchy-of-needs approach to supporting international postgraduates. Others with less experience might be less able to, or aware of the need to, do this, yet our research shows students who are troubled by personal issues, of which finding somewhere to live and settling into a new cultural context are major examples, are likely to find it takes them a long time to settle into producing the conceptually complex, intellectually sound work of which they are capable.

International postgraduates enable the development of an international network of research-building capacity for the future. However, problems of seeing international students as a market or 'cash cows' (culturally insulting as a term) feature regularly in the UK in *The Times Higher Education Supplement*, which exposes universities seen to be selling their international students short, whether studying in the UK or at a distance, or in their home country on Western/Northern university-franchised courses. Differing standards of tuition in the home country are one issue; another is the cultural inflection of what is studied, which might seem biased because of its Western, European focus. Yet another issue is support and provision, research skills, and tertiary literacy support in particular. In spite of the identification of special supervisory requirements for international postgraduate students and their supervisors (Trahar, 2011; Parker, Kirkpatrick and Slaney, 1996; Reeves and Robins, 1995), and policies and plans identifying the need for, amongst other priorities, development of cross-cultural understanding, and recognition and support of cultural identity, there has been very little systematic response at institutional levels.

Some of this response would include support for language at tertiary literacy levels. At Griffith University, Australia, international postgraduates receive such support through language services, as they do at Anglia Ruskin

University, while universities in the UK, such as Nottingham and Bristol, who have high numbers of international students and particularly postgraduates, also normalise such support. More covertly, in other contexts students will seek language editors to enable them to express their conceptual critical work at a sufficient level for the research to be appreciated. See chapter 21[?] for examiner thoughts about the need for clarity of expression to convey clarity and level of thought, but the flexibility over varieties of English to enable such expression. At Curtin, the 'Communication-in-Context' policy indicates the need to develop English language discipline-specific communication skills, particularly for those students for whom English has not hitherto been the language of study.

Issues of tertiary literacy are complex and fraught with potential cultural preconceptions. It is important that all students be enabled to articulate their ideas at the level at which they are working and thinking. Working in another language clearly hinders this. It is important to remember that literacy for any of us is evolving, developing and contextual. Tertiary literacy is not only about functional competence in complex texts (whether reading or writing them) but is also about being able to participate in appropriate ways in the discourse of one's chosen discipline – to enquire, interpret, hypothesise and challenge, in short, to negotiate meaning (Kirkpatrick and Mulligan, 1996, p. 1).

Students studying in another country also need to consider issues of their cultural involvement, entrance into values, the study culture and discourses of study in their discipline. For some students, the level of language ability is crucial. At Anglia Ruskin University, in our 1999–2003 work with undergraduates and postgraduates, students remarked in focus groups on the necessity to translate what they hear and read. They first translate, then slowly analyse, think complexly and approach problems, and move towards understanding, before translating back into English. Several international PhD students at Anglia Ruskin University use an image scanning, simultaneous translation device, but this works at the level of the word or phrase rather than holistically, slowing down comprehension. It hinders thinking and articulation, probably damaging the complexity of thought processes. This is particularly problematic at PhD level. It can also create an uneasy relationship between supervisor and student when the level of supervisory discussions does not match the level of the thought processes of either party. Ideas, developments and suggestions can be misinterpreted. Language support and development systems are needed for both students and supervisors.

Suggestions for institutional change frequently avoid issues of the cultural constructions of knowledge with which international students challenge us, albeit often unintentionally. A key issue is whether the approaches we have

to learning and research, and the suggested values and outcomes that under-pin these, are themselves culture and value-free, or are a product of a certain set of ideologies born of our own culture. A norm in higher education is to expect students from international contexts, who choose to study with us, to fit into the learning culture and practices of the host university, effectively becoming enculturated and assimilated into its beliefs and practices. We need to ensure that our commitment to certain kinds of learning and research behaviour is not merely a culturally inflected habit or approach *per se*.

There are concerns that some international students expect too much from supervisors by way of guidance, support and participation in the work. A related concern is that it is difficult to form relationships with some inter-national students as colleagues and equals. The first step towards addressing these concerns is to understand the likely reasons behind them:

> Many international research students come from higher education systems where it is normal to venerate age and experience and where it would be impolite to treat academics as anything other than near infalli-ble. Consequently, when removed to a Western culture the students find it inconceivable even to consider entering into debate with supervisors. It would be impossibly rude to imply that supervisors' judgement could be anything other than perfect, and it would be arrogant to assert their own ideas and opinions. Their role, as they see it, is to follow whatever instruc-tions their academic superiors choose to give them.   (Okorocha, 1997, in Cryer, 1997)

The accessibility of language, the research matter and the supervisory and training discourses with which students must become familiar comprise power-inflected issues. High expectations and dependency are issues, as is the authority position of the supervisor, exacerbated in the case of interna-tional students by their working in another language.

Support can be provided by specialist subject-oriented language semi-nars. At Anglia Ruskin University, three learning and teaching fellowship projects accompanied by action research have focused on tertiary literacy for master's students. For individual postgraduates and undergraduates, special-ist help could be provided for writing needs. Additionally, students can be referred to courses in Academic English, and to individual EFL (English as a Foreign Language) tutors.

For 76 Indonesian students surveyed in the first year of master's programmes at Australian universities, success was related not to language scores but to the kind and level of adjustments made by academic staff and departments to the students' needs (Phillips, 1998).

All research students benefit from support and clarification in terms of what is expected of them. Research student seminars and methodology sessions can be offered as part of systematic training for *all* students.

Our research (1997–2011) has suggested that much developmental work with international students is carried out in facilitative and supervisory dialogues. In their comments on procedures, Aspland and O'Donoghue (1994), Brown and Atkins (1988), Delamont and Eggleston (1983), Lowenthal and Wason (1977), Phillips and Pugh (1994), and Wason (1974) all note the importance of supervisory guidance. However, certain types of guidance might shut down thought processes and engagement, while others enable and empower (see Wisker and Sutcliffe, 1999; Wisker, 2000; Wisker, Robinson, Trafford, Warnes and Creighton, 2003). Different levels of dependency and need are significant factors for international postgraduates. Research conducted in Australia (Ballard and Clanchy, 1984; Ginsberg, 1992) indicates that Asian and other international students are often dissatisfied with their postgraduate studies and that they need better study skills and an introduction to culturally inflected learning behaviours in order to benefit more fully. It is the duty of the host institution to provide such developmental procedures, but also to provide training for supervisors who might themselves be culturally unaware of the issues their students present. Cultural difference might affect reasons for study, and expected outcomes. These need to be negotiated realistically, as do approaches to study at different stages in the research. Asking exploratory questions and problematising concepts is important, while synthesis, analysis and debate with authorities also needs establishing. Access to important learning resources might be adversely affected by language abilities: perhaps universities could make some texts available in translation. International students may need to be gently eased into the ways in which host institutions and Western/Southern learning cultures tend to use libraries, journals and books and integrate them into original work. In terms of being more immediately aware of language and contextual work, supervision or discussion in seminars, students need time to translate the complex ideas presented, and contribute in necessary discipline-related discourses. Good learning practices or study skills need to be made explicit early on and reinforced.

Different universities can share good practice. Some work effectively with postgraduate research students or undergraduates using adjunct or specialised courses and support. At Murdoch University, an ESL tutor is linked with a specific course with selected content and provides integrated language instruction using the course content and materials. This approach is used with first-year undergraduates (Beasley, 1990; Cargill, 1996). At Anglia Ruskin University, provision has now been successfully

embedded for master's students in Law, Business, Linguistics and Intercultural studies.

So, how can our international research students ensure that *their* English is considered adequate? Some students find it useful to have their writing checked by an English friend, or someone from their own culture whose English is better than theirs; others employ the services of translators. The concern of supervisors and universities is that the work is the student's own. Help with finding the right translation of a word, idea or expression does not constitute either cheating or plagiarism. English-speaking research students (like authors) are also well-advised to find a critical friend to help with editing and expression in a dissertation or thesis as it nears completion. The role of the supervisor is to start discussions about appropriate language, and to 'correct' or guide students with expression. It is not, I would argue, the role of supervisors to correct every language 'error' or inexactitude. To do so might entail substituting our own expression for that of the student.

Sometimes the language issue is oral, that is, it concerns conventions, acceptable behaviours and expressions in supervisory interactions. International students might be unused to offering their points of view or engaging in debate and argument. For some, to do so would seem to challenge the supervisor's authority and they are reluctant to do so. As supervisors, it is our responsibility to develop strategies for interaction with our students that enable them to learn and practise how to use the discourse of a subject, the meta-language or discourse of research, and the kind of communicative language used in discussions (see Chapter 9). Various stereotypes now enter the debate. Some students, particularly Asian women, tend to be quiet and retiring in seminars and research groups. They need persistent encouragement to become involved, so that they can benefit from airing their ideas in exploratory talk. Okorocha (1997) offers some suggestions for intensive development:

> Once students find the courage and confidence to debate and express their own ideas and opinions, they may need help to do so. Supervisors can help by allowing the students time to express themselves and by making openings for them in group discussions. Since the students may lack experience of how to express disagreement or offer their own ideas and opinions in a socially acceptable manner, their comments and questions can come across as rude when they do manage to speak out. Supervisors can help by advising them tactfully on acceptable forms of words and body language. With some international students, such training in self-expression can be a lengthy process, but the earlier in their programmes it is started, the better.   (Okoroda quoted in Cryer, 1997)

Articulating and sharing first ideas and then work-in-progress helps to build students' confidence, contributing to the supportive research community of peers. Rather shy or linguistically reserved international students need to be supported in their involvement in discussion. However, lack of such involvement is no indication that they are finding thinking and interpreting difficult. Language skills or tertiary literacy are not the only indications of a student's level of understanding:

> Most international students find 'receptive' language functions – reading and listening – easier than 'productive' ones – writing and speaking. However, the development of good oral communication is important if international students are to become full members of the department, participating in debate, problem-solving and creative thinking.   (Cryer, 1997)

There are widely held assumptions that many international students rely on reproducing information and deference to, rather than argument with, authorities (Biggs and Collis, 1991). At postgraduate level, this would clearly pose a problem, as engagement with research arguments and debates are essential. Liz Todd (1996) considers cultural differences with regards to approaches to study and students, noting that:

> Students often come from an environment where they are not allowed to criticise teachers, raise questions that could embarrass them or even to correct them if they make a mistake. It is therefore not surprising that they find it hard to put forward their own ideas. However, in the UK, postgraduate students are required to demonstrate that they appreciate that other findings are not to be simply accepted and reproduced, and to show that they understand how knowledge in a certain discipline is constructed. (Todd, 1996, p. 9)

Research and practice (Conrad, 1998; Phillips and Pugh, 1994; Zuber-Skerrit and Ryan, 1994) suggest that postgraduate students are supervised successfully when several support practices are in place, among which I would include cultural awareness, and supervisor and student development focusing on avoiding unintentional cultural discrimination or disadvantaging.

When students are on site studying full-time for a three-year PhD or MPhil in reasonable numbers, universities and their staff are encouraged (or pressurised) to ensure mechanisms and enabling practices are put in place. What is more complicated and potentially much more fraught with difficulty is responses to international students based overseas, studying part-time and working full-time. There are a number of factors to be considered. Part-time

study is a complication that makes supervision quite vexing, even with students who live round the corner, and this is exacerbated by distance and by cultural differences in approaches to research and learning.

▶ Context and shape of research into international postgraduate learning

Several studies have considered constraints upon international doctoral and master's students (Kiley, 1998; Kiley, 2000; Wisker, 2000; Singh, 2009). Action research has been carried out from 1998 to 2010 with UK-based post-graduate students undertaking PhDs, MScs or MAs at Anglia Ruskin University (34 students, of which 30 were at PhD level, 2 at MSc level and 2 at MA level) and six cohorts of Israeli PhD students (approximately 250) working at a distance. The research has revealed certain discrepancies in the preconceptions of students and dissonance between their research-as-learn-ing approaches and the expectations of UK postgraduate degrees, as desig-nated by the university's research degree committee in relation to international standards. Chinese students, one on an MSc and another studying for an MPhil, both reported being thrown in at the deep end, with little or no support to familiarise them with the computers and packages available, and little time allotted for one-to-one supervision. On the MA in Women's Studies, two female Chinese students – one from Taiwan, the other from Hong Kong – systematically underperformed, producing work that both reproduced authorities unquestioningly and failed to problematise key issues in the discipline, both during questioning within seminars and in disserta-tions. Individual support for their research development, tertiary literacy and expression has subsequently enabled each of these students to succeed.

The students in the international PhD cohorts have the experience of studying within a different context and learning paradigm from UK-based students. However, all are required to fulfil the requirements of European research paradigms. Cultural inflections in their study and in our research need to be fully identified and taken into account. Comments of international undergraduates about culturally inflected learning differences and needs are equally true of postgraduates:

> There are many common sense reasons for arguing, and there is also emerging empirical evidence, that at least some aspects of students' conceptions of learning may be embedded in cultural (or even religious) beliefs and practices.   (Meyer and Kiley, 1998, p. 8; see also Biggs, 1991; Hughes and Wisker, 1998; Samuelowicz, 1987)

Our work with international postgraduates indicates a need to recognise and develop supportive supervisory practices in relation to (culturally inflected) learning styles and expectations, without undermining students' aims and outcomes, or adopting an unintentionally culturally imperialist stance with regards to their work. We need to ensure that suggestions for development are not merely products of a different cultural context (the facilitators' or supervisors') rather than necessary to effective research.

Our research with international postgraduates is informed by research into a broad range of international students' experiences of UK and Australian teaching and learning methods and expectations. Several studies (Bloor and Bloor, 1991; Landbeck and Mugler, 1994; Todd, 1996) suggest that while international students are aware of the different kinds of learning activities, and different learning demands in new learning environments, nonetheless, their lack of prior experience of tutor–student relationships and working in small groups, for example, could hamper their learning. Samuelowicz (1987) found that only 28 per cent of international undergraduates at the University of Queensland were familiar with any kind of tutorial and only 18 per cent with group discussion. Having no opportunity for exploratory talk in groups could lead to under-formed ideas and a lack of experience in debating and arguing points of view – both of which are critical for undertaking research. Harris (1995) noted of international students, particularly postgraduates, that 'it is probably that the experience of being an overseas student itself encourages a cautious serialist approach to learning'. This approach could manifest itself in the desire for clear guidelines, and straightforward research questions and methods. Sometimes this can lead to accumulative approaches over meaning-oriented approaches, which, particularly at PhD level, could pose serious problems for analysis, critique, problematising and creativity.

Undergraduate and postgraduate international research students often have different expectations of the tutor–student relationship, and different views of knowledge construction. Ballard's (1991) continuum of student attitudes and learning behaviours ranges from conservation of knowledge (and reproduction) to extending and encouraging questioning, problem-solving and creativity. This is a useful vehicle with which to consider students' work. 'The speculative approach; which is particularly characteristic of postgraduate students' (Todd, 1996, p. 4) is located at one extreme, and mechanical reproduction of given ideas and information at another. Students rewarded in a system encouraging reproduction of authorities, without offering opportunities for debate and articulation of a variety of views, might find it difficult to take a problematising approach in the first place. For researchers, this could cause particular problems which, it could be argued, are not actually

products of a specific culture but of the level of creativity and argument required.

One result of our research with international students has been the discovery that those whose learning approach is more appropriately described as accumulative rather than meaning-oriented, and whose outcomes are transformational, are more likely to experience difficulties and 'dissonance' in the mismatch between approaches, methods and outcomes than students whose approaches are more meaning-oriented. Typically, this would take the form of a desire and plan to use large numbers of question-naires and experimental methods, when more qualitative methods would better suit transformational aims (see Wisker, 2000). It has been important to work with students to enable them to identify this potential mismatch and own the ways of overcoming it at an early stage, by developing more appro-priate research methods. However, it is essential to match understanding with the students rather than impose ideas and methods. Developments need to come from within the work itself, be owned and understood by the student, or they will not be successfully actioned. Developmental supervisory dialogues and involvement in the action research itself have facilitated students in this enterprise (see Chapter 8). Here, we have attempted to deter-mine what kinds of interactions enable students rather than silencing or directing them, and what kinds of questioning can draw out reasoned argu-ment or intuitive leaps rather than merely factual statements, encouraging creative and analytical thinking and ensuring that, as far as possible, language barriers are eased and complex interactions enabled.

Michael Singh urges us as supervisors to recognise our 'ignorance' of the research practices and ways of knowing brought to Western institutions by, in the case he discusses, Confucian heritage Chinese research students. His work extends that of Lingard (2006, 2007)

> regarding the internationalisation of postgraduate supervisory pedagogies in terms of the challenges for de-parochialising research education. Here research education is thought of as involving more than teaching students about using theoretical concepts, research methods and the analysis of findings. Sociologically speaking, the internationalisation of research education focuses on building connections between the intellectual resources international research students can draw from varying points in the global hierarchy of knowledge to inform research, thereby making unanticipated and unexpected contributions to knowledge.   (p. 186)

Talking of the US, UK and Europe, Singh suggests that 'In these western nations different assumptions about supervision are informed by, and inform

differing traditions of critique as much as they do assorted understandings of creativity or originality in intellectual work and knowledge production' (p. 190). He sees the engagement with different knowledge traditions, histories and ways of seeing as an opportunity to extend 'arguers' and to enable artic-ulation agency through varied knowledge traditions. The often silent or muted critical response of Chinese research students should never be taken as lack of engagement but rather as a culturally constructed response. Using the work of Jacques Rancière (1991), he looks at how Rancière considers his own pedagogical principles and practices in terms of what they say about ways of enabling north-east Chinese research students to develop their processes of argumentation, while Singh takes it further and seeks to find how Chinese research students develop and exhibit agency to articulate their own intellectual heritage in English-speaking journals and intellectual contexts. There is a mutual reciprocal benefit in enlarging the range of modes of intellectual engagement, richness of interpretation and under-standing, and of challenge and knowledge creation, which richness could be lost if students are silenced, marginalised, and not encouraged to develop agency. Everyone loses in this instance. And everyone has something to gain intellectually in finding ways to share, appreciate and work together with different intellectual traditions, world views and modes of learning and research. Singh's focus on Chinese Confucian-heritage learners makes a valuable contribution to a wider discussion, which would also include cultur-ally diverse indigenous learners, and those from other learning traditions, including the Arabic-speaking world.

In the case of many international postgraduates who are mid-career professionals, there is another issue. Their own status as professionals working for their doctorates part-time, holding down important jobs as deans, head teachers and key staff members, means that there are difficulties of pride and hierarchy to be overcome in exchanges with supervisors, espe-cially until working roles have been established.

At Anglia Ruskin University, international PhD students received a tight, coherent, bespoke programme, which, because it was compulsory, enabled consistent and coherent, across-the-board engagement with the develop-ment of the whole 'story' or path of the PhD, that is, ideas, titles, methods and the processes of research. In sessions, everyone was enabled to partici-pate through the use of group work and pair work around developmental questions.

The particular moment for drawing out and developing ideas is, at research and PhD level, that of the supervisory dialogue. However, supervi-sory dialogues and structured programmes only help maintain momentum to a certain extent. Many students at home and abroad have also found it useful

to develop student support groups amongst colleagues who work closely together (see Chapter 10), are working on similar projects, are using similar methodologies, or are at least geographically close so that there is someone with whom to share developments, doubts and discoveries. For some, just being in touch with the developmental trajectory of others is motivational enough. As with the Open University, and other self-help peer groups (see Bochner, Gibbs and Wisker, 1995), students contact each other between elements of the programme or supervisory meetings and discuss progress, advise each other on methodological strategies, and maintain motivation. For part-time students with demands from work and home, this is essential, as it is when students are working at a distance from their supervisors, in another country, and need support at home in terms of finance, space, libraries and other opportunities for information acquisition, and, in universities, an accessible, culturally sympathetic supervisor (see Chapter 13).

International doctoral students have been an ongoing research interest. Three studies form the basis of our research discussed here: (1) is part of ongoing action research I conducted with Gillian Robinson, Yehudit od-Cohen, Miri Shacham et al., with a large (Middle Eastern) PhD cohort-based programme (1998–2010) at Anglia Ruskin University; (2) is National Teaching Fellowship-funded research (2005–2010) with international doctoral students, supervisors and examiners, which I conducted; and (3) is cross-cultural supervision research that Jennie Jones and I carried out (2008–2010) at the University of Brighton. Our data derives from specific research activity conducted across all three projects, which involved face-to-face and email interviews with students and supervisors and focused on cultural inflection and perceived related effect. Our research participants are largely on PhD routes. We are looking at what we define as 'the culturally inflected voice', which the students develop in their research and its outcomes. This focus recognises and values the impact of cultural difference on choice of topic and conduct of research; the cultural, contextual inflections reported by postgraduate students; and suggested effective ways of enabling these cultural inflections in a cultural and a research context which differs from that of the international student. Our work also asks early tentative questions about how culturally contextualised issues affect completion of the PhD.

We worked with others for 12 years on a Middle East/UK international doctoral programme which has so far graduated over 200 PhDs. Most of the research evidence gathered in our first study concerns recognising the culturally inflected voice and derives from action research conducted alongside our work as supervisors, programme facilitators and co-researchers with graduates from the programme. Those on the programme were mid-career professionals, who studied part-time and at a distance. Others

involved in the second study were also part-time mid-career professionals, from a range of contexts, some studying in the UK, some in Malaysia, South Africa, Australasia, Sweden and the Caribbean; and those in the third come from all age ranges 21+, although most were part-time mid-career professionals. Their discipline areas ranged from the pure sciences through health to business, social sciences and the humanities and arts.

▶ Participants, research, interviews

Students from different cultural contexts (from our own, whatever those may be) might work in culturally inflected ways in terms of research and learning behaviours; choose culturally and contextually inflected areas in which to work; and intend their research to make changes which are culturally significant. Many can make those social, cultural, political and scientific changes in their own cultural context because of the PhD award, which provides credibility and the right to speak. Interviews conducted with doctoral students on all three projects focus on the issues of enabling the 'culturally inflected voice'. This leads to some suggestions of what could be developed to encourage and support the 'culturally inflected voice' through to success in a broader range of cultural contexts. This is further developed in Chapter 14 on gender, culture and age. Results from our research indicated the importance of supervisors and examiners gaining culturally contextualised information about the doctoral students and their research; respect for and a need to find out about and, where appropriate, encourage culturally inflected, sometimes indigenous constructions of knowledge, values, disciplinary choices, modes of research; on an everyday basis, supporting students (or indicating where they might find support) with issues of translation, and expression, and argument rather than deference.

▶ Cultural issues and power relations

The relationship between supervisor and research student is always one that necessarily engages with and is affected by discourses of power and authority. The distance between one seeking acceptance for his or her voice and work, and one directing and advising, however supportively, is necessarily great, even if hidden. This can be potentially exacerbated where the supervisor might be younger or of lesser status than a mature student seeking a PhD, or of a lesser status within their home university than a professional seeking a PhD. Kisane Slaney's (1996) work with international postgraduate

students at Curtin highlighted several strategies that both recognised and attempted to overcome the authority/discourse distance, enabling students to become empowered, and so develop their own voice.

Slaney's theoretical underpinning utilises notions of power structures and exchanges established within poststructuralist Foucauldian analysis, to which she brings her own position as a feminist: 'Poststructuralists acknowledge explicitly that meaning consists of more than signs operating and being operated in a context. Rather, there is a struggle over signifying practices. This struggle is eminently political and must include the relationship among discourse, power and difference' (Lankshear and McLaren, 1995, p. 13). Foucauldian discourse recognises that relationships of power govern exchanges between people. Applied to the context of postgraduate–supervisor exchanges in a culturally mixed context, these discourses of power involve:

- the supervisor's position of authority within the university context – one who can support and agree and guide or prevent (to some extent) the students' acceptance and development
- the supervisor's position as one who 'owns' the discourse of postgraduate study by being part of the system and having already entered into and mastered the language related to the system of postgraduate study – everything from university regulations to the stages of research projects, to accepted norms about final degree quality
- in the case of international students, the supervisor's mastery of the discourse of the cultural context in which the research degree is being taken.   (Slaney, 1999, p. 72)

This last item is one affected by the kind and quality of the student's own command of English, and the supervisor's ability and sensitivity to engage in dialogues that enable entrance into this discourse rather than exclude the student from it, for example, by not using too many obfuscating, jargon-ridden words.

As members of what Malcolm (1996, p. 1) defines as 'discourse communities', supervisors in all contexts, but particularly those working with international students, need to be careful not to marginalise, 'otherise', or deny voice to the students. Slaney invited supervisors and students to work collaboratively on strategies to enhance students' English language skills at postgraduate level, setting up action research sets for supervisors and postgraduates to monitor and facilitate the development of these strategies and their usefulness. The action research involved collaborative developmental work with the supervisors; regular supervision and joint sessions to enable

an exchange of ideas between supervisors and students; and ongoing moni-
toring and final evaluative sessions in a collaborative mode 'to obtain a
picture of the development/enhancement of the student and supervisors'
communication skills, in the context of the supervisor relationship and the
students' postgraduate studies' (Slaney, 1999, p. 73).

Slaney's summary of reflective questions for supervisors of students
whose first language is not English provides a useful guide:

- Have I made my expectations explicit to my student?
- Have I seen the *totality* of my student, and taken into consideration the
  impact of her/his *life-world* upon her/his studies?
- Have I taken into consideration the possibility that my student will be
  going through a process of *transition*, as she/he negotiates cultural
  and disciplinary *border crossing*?
- Have I taken into consideration both my student's and my own need to
  work on *interpersonal communication*, addressing issues of *gender*,
  race, *ethnicity*, etc.?
- Do I have a process of *documentation* in place with my student,
  whereby we can record *actions*, *reflections* and *progress*?

Additionally, drawn from my own work with international students, the
following questions may be asked:

- Does my student need to develop a range of research and support skills
  because these have not been necessary in their previous university or
  workplace, perhaps because they are unavailable, or because others
  have carried out the tasks for them?
- Can I spend some time inducting my students into appropriately polite
  behaviour to others in the university (including administrative staff)
  when seeking their help. Lack of politeness might be due to shyness, or
  the acceptance of different behaviour at home.
- Have I made time demands and deadlines sufficiently clear? In some
  cultures, meeting times and work deadlines are less clearly defined,
  more flexible than in the US, Australian or European context.
- Could I make contact with others in the student's culture or read up
  about it in order to be better aware of experiences, behaviours and
  norms? Could I call on these contacts if some difficulties in communica-
  tion arise?   (adapted from Slaney, 1999, p. 73, with additions)

Okorocha (1997) also has a series of suggestions, ranging from orientation
about other cultures and cultural issues, examination of implicit assumptions,

showing interest in students' welfare, and negotiating student–
supervisor etiquette and clarification of meaning. Some supervisors identi-
fied benefits and/or needs in relation to culturally inflected research learning
practices and forms of expression brought by or encountered by the post-
graduate students. One supervisor notes:

> The use of specific terminology posses two challenges. The first is of intro-
> ducing the candidates to a whole new range of terms and concepts that
> they have never encountered, and the second is of transmitting the
> meaning of such terms from one culture to another.   (Interview 24)

Research learning approaches also present issues:

> There are also the cultural differences where approaches and expectations
> are different from the two sides. I remember some comments made by my
> cohorts such as 'the English want it done this way', or 'they do not under-
> stand this issue like we do'.   (Interview 24)

This supervisor sees mutual learning and exchange as a way forward, both
recognising cultural inflection, and enabling a dialogue across cultures:

> It is my impression that the way to surmount these cross-cultural difficul-
> ties is by a fully engaged dialogue which is fluid and continuous all along
> the duration of the process.   (Interview 24 parallel project)

There is a host of factors influencing choice of topic, research design,
knowledge construction and the power-inflected relationships between
research supervisors and students. However, in this context, many students
who have chosen to undertake culturally inflected topics use, in some cases,
culturally inflected research processes. They then take their constructed
knowledge back into their communities and enable change. Instead of being
overwhelmed and silenced by difference, some of the students studying in
the UK context were pleasantly surprised at the engagement with ideas,
dialogue and independence expected of them:

> from discussions with doctorate level students in Israel I anticipated that I
> would be asked to do a bit of research that interested my advisor; this in
> addition to course requirements.
>   The approach which places responsibility on the doctoral candidate to
> be an expert in his field appealed to me. This, coupled with the detailed
> and graded materials dealing with research and methodology suited me
> personally.   (Interview 23)

There are also interesting perceptions about language and style which go beyond the more commonly argued concerns about tertiary literacy. Instead, they concern approaches, tone, attitude, and address, which are themselves culturally inflected. One postgraduate talked of the way in which, in Korean culture, the writer will circle round the main arguments and philosophise before developing any kind of argument, while Miri Shacham comments on the Israeli culturally inflected voice, that:

> From my experience as a researcher, I had found that cultural context affects writing style. I assume that Israeli students, for example, would write in a more direct way, sometimes feel the need to say thing openly or with a little impertinence.
>
> Writing style can be indirect, cautious in discussing sensitive issues, trying to be politically correct and I believe that some of these features of writing style are affected by life experiences and culture differences.
> (Miri Shacham, Interview 27)

Students commented on the way in which they had to bridge the gap between the knowledge of their supervisor and their own contexts, particularly when it came to the writing of the thesis:

> It's like that I give someone to read and I know that he is not from Israel so I write it for myself, at the beginning I wrote for the supervisor and I know that he is not Israeli so it forced me so that he would understand. It is always in my head. He is not an Israeli reader. And also because I think it's international because of the violence in the World, I understood that I must go also out from Israel.   (Interview 28)

They report on the difference their culturally inflected PhD has made to their sense of identity and career development.

International and culturally diverse research students can benefit from our awareness of their culturally different learning and research strategies; our institutional lobbying and advocating for appropriate development and support provision for research skills and tertiary literacy; and our willingness to avoid cultural imperialism. The good supervisor will work towards a truly internationalised learning-as-research experience, and the mutual student and supervisor willingness to research and learn together enables difference to be a reason for recognition and enrichment, rather than confusion or power games. Research is a global activity; the more we understand each other, enable each other and work together, the richer the research will be, and the richer the ongoing global, collegial, community relationships between supervisors, and supervisors and students.

▶ **Further reading**

Cargill, M. (1996) 'An Integrated Bridging Program for International Postgraduate Students', *Higher Education Research and Development*, 15(2), 177–88.

Cryer, P. (1997) *Handling Common Dilemmas in Supervision: Issues in Postgraduate Supervision, Teaching and Management*, Guide no. 2 (London: Society for Research into Higher Education and The Times Higher Education Supplement).

Freckleton, L., Creighton, E. and Wisker, G. (2003) 'Internationalisation of the Curriculum and Employability', *World Views: The Magazine for UKCOSA Members*, 11, 10–12.

Grant, B., McKinley, L., Manathunga, C., Knowles, S., Singh, M., Wisker, G. and Robinson, G. (2010) Symposium on Cross-Cultural Supervision, Quality in Postgraduate Research Conference, 2010.

Zuber-Skerritt, O. (2002) *Supervising Postgraduate Students from Non-English-Speaking Backgrounds* (Buckingham: Open University Press).

13 Study and support at a distance and for part-time students

Many postgraduate students study part-time, either by choice, fitting it in around work and domestic demands, or by default, when their period of full-time study runs out, and/or their lives change and their patterns of research and work change. Many part-time students undertake research which develops from and feeds directly into their own professional practice. Increasingly, both undergraduates and postgraduates are seeking to study at a distance. Good practice in working with all research students is the firm foundation for good practice working with students at a distance, part-time, and from culturally diverse backgrounds, where each of these variations can present specific issues. Managing expectations, setting up clear, negotiated communication and supervisor–student interactions, and finding out about each other's learning behaviours and approaches, then establishing and maintaining a professional personal relationship, over time, should support students in producing their best work and make the supervisor role stimulating, manageable and rewarding. All postgraduates need good access to study facilities, and a negotiated way of interacting over time with their supervisor. Postgraduates who study part-time probably need more time management skills and clear access, since their time is limited and they tend to have to balance and segment their lives; they pick up their research work and researcher identities, and then pack them away again. They need good access to their supervisors and facilities, when they can study. Part-time students often have to juggle research alongside full-time work and domestic responsibilities. Some are also studying at a distance, and so their needs are similar to those of other distance students. Research students at a distance, whether nationally or internationally, and based abroad, need systems by which to contact their university supervisor, and you will probably find that different modes of contact suit the interactions and rhythms of different students, at different times in their research journeys. Phone, letter, email, fax, Skype, instant messaging and, if they are available, video conferencing links between individuals or groups of

students and supervisors are all useful in order to maintain contact, access library facilities, develop community and enable the kind of quality interaction which is more usually carried out face to face. Part-time, local or distance students need to develop very good time-management skills to juggle all of these demands, and as supervisors we both help them manage their expectations of their own work rhythms, productivity and institutional expectations, and negotiate ways of working which facilitate good research and development dialogues, so that these research relationships are mutually beneficial and successful. Some thoughts on and examples of building effective research communities are discussed in Chapter 10. These can help sustain students working part-time and at a distance when they are not in touch on a daily basis with their supervisors and other students. Some of the ground rules discussed in Chapter 4 would be useful here.

This chapter considers:

- *issues and practices in supervising part-time students*
- *issues and practices in distance supervision, including cultural differences*
- *strategies for effective distance supervision, including email, video conferencing, online supervision, Skype, etc.*
- *distance supervision with international students*
- *institutional support and community building*

▶ Part-time research students

Why do students study part-time? And how can we support this? They might study part-time because of work/life pressures, the need to underpin professional practice with research, and the increasing need for ongoing learning and skills development for the changing workplace and professional demands. Many such part-time postgraduates include international students, and professionals returning to learning to enhance skills and promotional opportunities, and often these kinds of diversity are combined with others such as age, gender and culturally inflected learning backgrounds. Part-time research students could be studying now because of their desire to gain promotion, fuel change in their workplace, move on in their professional careers, or it could be the right time for them in terms of domestic and other responsibilities. Perhaps this is the first time they have been able to give

themselves the right and time to study. For some it is a work–life balance choice, so that they can continue to earn while they study and balance study with other elements in their lives. If they are researching part-time they could be involved in any of the full range of disciplines and issues and present any of the same full range of needs and issues as students who are full-time, but these could be either exacerbated by or somewhat modified in a positive fashion by their part-time study.

They might be combining across disciplines and some will be working at a distance from you as supervisor and from the facilities of the university. This will require careful time management and possibly some extra attention to their ability to access online resources. Any research development programme should be sensitive to the time demands and work patterns of part-time students as well as full-time students.

It will be important to be particularly clear about ground rules, availability, and to suggest their involvement in a peer support group, as well as alert your students to any developments and opportunities in the academic community which they might miss through not being full-time and on site.

The spread of research development programmes and of EdDs, PrDs and part-time master's courses has alerted us to the needs of part-time students:

> Another manifestation of the new programme-based approach is a greater awareness of the particular needs of part-time and distant students, and a resolve to provide them with a similar quality of student experience to full-time students. Common challenges include the difficulties such students often face in actively engaging with the research culture and "community of practice" of the institution.   (Wikeley and Muschamp, 2004)

Part-time students are also often older than their full-time counterparts and some will be your academic colleagues. In Australia, the greatest growth in part-time postgraduates is among the over 60s. Within this kind of demographic, it is probable that their reasons for study, the pace and ways in which they are likely to be able to juggle study, life and work, are all very different from the patterns and behaviours of full-time students. Chris Parks cites Watts and others:

> Some part-time students are drawn from the academic staff of higher education institutions and the supervisor/supervisee relationship that is entered into between colleagues requires particular adaptive behaviours by both parties if the interaction is to accord with renegotiated academic boundaries (Petersen, 2007), and role tensions kept to a minimum.

> Common challenges include the difficulties such students often face in
> actively engaging with the research culture and 'community of practice' of
> the institution (Wikeley and Muschamp, 2004), of being reflective and
> developing active awareness of their own learning practices and achieve-
> ments (Wisker et al., 2004), and of making effective use of online delivery
> (Adams and DeFleur, 2005) and mediated communication (Dooley, Kelsey
> and Lindner, 2003).   (Park, 2007, p. 29)

As supervisors we need to:

- Find ways to establish social understanding, communication and
  contact.
- Put students in touch with others at a distance, local to them.
- Ensure a community is established, clarify online expectations so they
  can engage, use blogs, social learning spaces (Wisker, Robinson,
  Trafford, Warnes and Creighton, 2003).
- Tailor the support for research development practices and skills – staged
  research methods development – MRes, staggered provision of postgrad-
  uate research methods courses.
- Adopt something more like the American model – staged, involving
  coursework, plus a dissertation.
- Change the shape of the doctorate to suit different postgraduates and
  their outcomes – developing more professional doctorates, DBA, EdD.
- Develop flexibility with supervisory provisio.
- Ensure sensitivity over peaks and troughs, work and life interruptions –
  domestic and work demands and completions.
- Offer critical and developmental feedback online in a dialogue rather
  than a merely summative form, which would shut down developmental
  discussion.
- Nudge conceptual critical and creative work through interactive feed-
  back.

▶ Using technology to keep in touch

Students working at a distance from their supervisors could be working at
home, across the world, or in another town or county. Effectively, if they are
not present, you are working in a distance mode, which has all the attendant
issues of accessibility, establishing good working interactions, and finding
culturally sensitive ways of dialoguing so that learning can take place
through the distance interaction. Some distance communication can repli-

cate face-to-face, to some extent. Videoconferencing does this, so does Skype, and both can therefore include a sense of gesture and interpretation of body language. Both offer something which resembles rapid dialoguing and building of ideas and agreement that a face-to-face supervisor can offer. Email and online communication can also build developing interactions and critical thinking through sensitive feedback, which feeds forward to enable learning in a dialogue. Those supervisors who have distance students need to communicate in a supervisory, developmental fashion, advising over the use of research development materials online, or any other format intended to support and guide the student. In a best case scenario, the student would be well equipped with Internet and email access, and any programme for taught master's or research training would be written with full recognition of the pedagogical implications of distance and e-learning.

▶ Distance support and distance students

Contact between supervisor and student is crucial with both part-time and distance supervision, but it is not merely a matter of getting the communication medium or the technology right. Distance students might also be from a different culture from that of the supervisor, so finding out about, respecting and working with each other's culturally inflected research and learning behaviours is very important (see Chapter 12). There could be a myriad of differences and potential difficulties in terms of communication rituals and methods that need to be dealt with early in agenda-setting and making decisions about ground rules for distance supervisions. Getting into good habits about polite, social and supervisory communications will help the research and supervisory relationship to develop more smoothly. So will matching technology, so that both student and supervisor can read, comment, question and return work with accuracy and ease. Watts advocates clear communication and good use of e-opportunities.

> Maintaining good communication with part-time students can be difficult, particularly with respect to striking a balance between support and harassment. Too frequent contact may convey an expectation of the requirement of 'measurable' progress on a week-by-week basis. Email or telephone contact every month is more helpful and more likely to accord with the comfort values of the student trying to develop an appropriate pattern of integrating doctoral study with the rest of life. Varying this approach to introduce a 'high-frequency contact model' can be a function of the different stages of the student's candidature and there is an

> increasing likelihood that communication with and support of all doctoral students, both full and part-time, will in future be transacted much more commonly across 'E' spaces.   (Watts, 2008, p. 371)

Students could suffer from isolation, lack of clarification, cultural misinterpretations, and lack of a community. We might adapt some of the strategies derived from good practice with e-learning or the OU, including very clear negotiated rules, regular contact, milestones for expected work, timely and very clear feedback. To enable this we need to negotiate with our students the use of 'track changes', 'comment' and electronic feedback. It is also useful to make the most of any opportunities for face-to-face contact, and to discuss their work face-to-face via Skype, or discuss and share the text via Elluminate (or some other system that enables discussion, visual interaction and text sharing). When beginning email or other technology-based interactions it is important to observe codes of practice so that communication is clear, understood and not inadvertently offensive. This is helped by exchange of personal, friendly information, greetings, establishing your different contexts, and taking care with the tone of contact. It is also important to explain and use the language of 'doctorate'ness as well as that of polite supervisory exchange.

Research into the support of distance students engaged in writing for academic purposes (Wisker, 2009a; Jones, 2009) indicates that identifying and working to overcome the potential difficulties of distance through making full use of online writing support, and learning through developmental dialogue and interrogative prompting (ways of asking questions which engage students in critical thinking), alongside the range of other online support (blogging, email for quick responses, Skype for discussion) can be a really close way of engaging with the thought and writing process of students. In this way, there can be a developmental learning dialogue which could be as rich as or even richer than face-to-face supervisory discussions. Antoniou and Moriarty (2008) are in support of online blogging or journalling, suggesting that such reflexivity can also bring the student's own voice into the writing, and make the latter more lively and original. Where journals are shared through blogs they can also become spaces for debate, adding another dimension of creative collaboration to journalling, and academic writing. McVey (2008) says that the creative element of online journalling is important in helping to address current issues in the context of students' writing in HE.

Videoconferencing – This is an interactive (if sometimes stilted) medium and not open to all students who would like to keep in contact and be supervised at a distance, because not every university campus has the facilities

and many students are too far from a campus to access those that exist. However, it provides an excellent opportunity for supervisory discussions of a general kind, or work-in-progress joint tutorials to take place at regularly identified and organised intervals. For example, on one business and accountancy degree course, audio tutorials are conducted between tutors at the University of the South Pacific. Dispersed students live and work on a variety of islands, including the Cook and Solomon Islands, some of whom are actually on a different day as well as a different time zone. The University of Helsinki piloted a WIRE project involving tutorial videoconference link-ups from several different countries, enabling discussion among a wide variety of international students, sometimes managed by the tutor, sometimes independently. At Anglia Ruskin University, postgraduates on different, including remote sites, 'meet' regularly to share their work-in-progress and support each other. The tutor or manager of the supervisory group visits students' Friday morning videoconferences to answer questions and stimulate the debates that develop within the group. International PhD students are sometimes able to discuss their work with supervisors via a web-cam. The benefits of videoconferencing are the ways in which it can build up a community discussion with another student, replicating the research community, and the face-to-face element, which gives a sense of presence and the ability to interpret body language, as well as the spoken or written, in an interaction. The main benefit with distance learning students is that videoconferences offer very close replicas of supervisory interactions in person and of group discussion in person.

Skype – Supervisors working with students studying at a distance often use Skype or, when working with a group, other forms of visual and audio interaction, such as Flashmeeting or Elluminate. With Skype, for example, several people can be in a discussion at once, there can be video or not, depending on your choice and the kind of connection you have established, and the sound of your voice and that of your student make the whole interaction more real and immediate. Sometimes a (nearly and distanced) face-to-face discussion over these video and Internet modes can help develop rapport and cultural understanding about forms of expression and interactions, so that complex ideas and discussion can take place much more quickly and are less likely to be confused by the kinds of misunderstanding sometimes entailed by a written mode.

Email – This is by far the most easily accessible and probably successful medium of contact between supervisors and students at a distance because most students now have some form of access to a computer and the Internet through their own facilities, or those in the University, library or Internet café. However, it is advisable to check the quality of the Internet connection

and the accessibility for the students should they, for example, be in some areas of developing countries where the access is intermittent. Email is useful partly because it is asynchronous, so students can type in queries at any time that suits them, time zones are no problem, and they can be readily answered at regular time slots by the supervisor. It is important to identify when you are able to answer student queries, because being online some-times suggests that you are available the whole time. 'Virtual office hours' could be a solution to this expectation and help you manage both your own time and the students' expectations. For particularly relevant questions, discussion groups between a number of students working on a research area can be established to share questions, discoveries and strategies, inviting the supervisor to join in and comment, add, query, and dip in and out of the discussion group. Those of us involved in email discussion groups will know this provides a good sense of staying in touch with lively developments among peers. A colleague working on a distance MSc regularly exchanges emails with students (they are widely dispersed in Hong Kong and parts of South-East Asia). Others phone her up at (sometimes) convenient times at home. The phone is probably a better medium at crucial moments when complex issues need discussing, when a pre-booked tutorial can enable real-time discussion.

With email, some attention needs to be paid to conventions of address and tone, bearing in mind cultural differences in particular. Email can be rather hasty. Sometimes the tone is inappropriate and 'flame mails' (origi-nally keyed in haste) are unlikely to aid good supervisory practice. Supervisors need to develop skills in distance communication – the tone, language, regularity and variety of interactions to support learning.

Using VLEs such as Blackboard and Moodle can help supervisory interac-tions, particularly if there are groups of students working with a supervisor, however dispersed, since both students and supervisors can interact in the discussion spaces and post up work in progress for critical friends and super-visor response. There can be issues in terms of accessibility of learning materials and ongoing communication between supervisor and student. Supervisors and students alike might need to develop skills such as writing and uploading e-learning materials and activities into an accessible place, whether it be the VLE, a social networking environment open to the student group and supervisor, or even onto a CD-ROM to send to the student. Not all supervisors need to be able to write materials, of course, and many develop-mental materials can be made available for all students by placing them on the university's research pages, while specific materials for the student or student group can be placed on the supervisor's, department's or project group's web pages, or on the VLE. An online master's supervision course on

which I co-teach, through Oxford Brookes University, engages participants who are developing supervisory skills, in group tasks, discussion and commenting on each others' postings, and the construction of group PowerPoints or wikis for assessment. Technological difficulties sometimes hamper discussion, some have to travel a long way to access the Internet, but personalised interactions and continued discussion formats in the course encourage sharing and knowledge-building about supervision, practised in the forums and assessments, which we hope transfers into their practice and their sensitivities about the similar difficulties their own students face in getting and working online, with them.

Not everyone will want to work through a VLE or use social networking. However, such use is becoming more frequent and natural as it enters so many aspects of our lives. Social networking contacts can be intrusive if students or supervisor invite each other into personal social networks, but there are facebook pages specifically for research project groups or supervisors' research groups, and these can enable interactions which are informative, supportive and also friendly. Ground rules are needed for all kinds of interactions and e-interactions in particular, because the connections are immediate and potentially intrusive. Establishing a tone for interactions on a social networking space or on the VLE, and ensuring some regularity of comments and engagement between student and supervisor which does not eat up everyone's lives and focuses in the main on the work being developed, would be useful right at the beginning.

Some examples follow.

Postgraduate work-based management diploma

Technology was harnessed to facilitate distance learning on a partly distance-learning-based postgraduate diploma for students involved in management studies in the pharmaceutical industry based in Japan, the US, Europe, the UK and the Far East. The programme was carefully devised to comprise a variety of learning and teaching modes accessible to all. Intensive workshops involved group work. Materials were provided and individual tutorials and supervisions held to help develop project proposals and enable students to understand the learning approaches. In addition, there were interactive open and distance learning materials, that is, workbooks and units on which students worked. Students, organised into small groups, were expected to read key trigger papers and discuss these with each other through a chat-room. Tutors could intervene in the chat-room with advice or to

answer questions, but the discussion and support mostly took place amongst the students. In their final submission of research project and completed workbooks, students included the computer-mediated learning. It was evident that many students had made use of the chat-room and online work in progress discussions. Many had also fully utilised the email discussion and exchange facility, and formative comment available from tutors for work-in-progress. Developed drafts of work were included with final submissions as evidence of using the full set of distance learning processes.

Establishing a course that is Internet-based or partially computer-mediated involving discussion and online support is quite different from changing supervision to email mode. The change was student-led in the case of one master's dissertation student, Ming Lo. Ming Lo returned home when her grandmother became ill. Revisions to her failed essay and supervision on her developing dissertation were all carried out over email. This was only possible because her supervisor learned to work in this way, despite being technophobic to begin with. They gradually discovered how to open email attachments and comment on them, and were willing to respond quickly to sent material. Even then, this was subject to a variety of blips with servers and materials lost in the ether. Staff learning curves and technology access can be an issue here. Additionally, pedagogically, supporting and tutoring or supervising students through distance media involves a different set of teaching and learning styles.

Pedagogically, email discussion enables both supervisor and student to interact as the work develops. Developmental thoughts and work-in-progress can be submitted, followed by an interweaving of questions and suggestions, changes suggested via 'track changes', attachments of texts for further reading, and rapid response to follow-up questions (see Chapter 9). It can, however, be a rather exclusive activity, available only to some, and is dependent upon both the quality of the communication available to the students and staff and their combined skills in handling this kind of learning. In the case of Ming Lo's dissertation, email was more than a developmental chat; it took on the qualities of a supervision – interleaving comments and conducting a variety of supportive dialogues.

Demands on supervisors are great when students are studying at a distance, since students can send work at different developmental stages, at times which suit them, and expect immediate responses because that is what the medium seems to offer. (Meanwhile, there is a struggling supervisor at the other end trying to keep pace with responding and carrying out all their

other work tasks.) While it is satisfying to be able to keep closely in touch through email or another distance learning medium, this can encourage unrealistic expectations and a form of dependency among some students. Anxious or fastidious students who need to check out each thought and piece of writing, both in progress and again when finished, can expect imme-diate and repeated supervisor response and some might move very slowly as they await your thoughts on each interpretation or analysis. This could be a great time commitment, and it could also encourage inconsistent levels of support. The insistent medium of email needs managing. I have asked distance students to indicate in their message line whether this is a quick question requiring a quick response, or a complex question or piece of work needing a more extensive response. Suggesting virtual office hours to deal with regular interactions, and realistic turnaround times for draft chapters or substantial questions, will make the interactions more manageable over time.

In some instances, postgraduate students could have a supervisor at the university, and one in their home country. In addition to ongoing contact between supervisors in the university and students abroad, there should be regular meetings with the home-based supervisor and support groups, so that conflicting advice is not given, and problems can be spotted and delib-erated early on. Students studying part-time can easily be put off their research if problems develop alongside those caused by work and family, and they have no one to speak to quickly to share the problem with, or to offer support and suggestions. Consequently, it is important for them to develop home-based peer group support, and for less formal, supportive supervisory interactions to be part of supervisors' repertoire with students. It is possible that part-time and distance students can make a number of demands on the supervisor which seem to stray into the areas of counselling and friendship because the research is a kind of intellectual and social life-line for them (as well as a cause for anxiety) and as a supervisor you need to decide how to manage this, with friendly comments and contacts at signifi-cant moments (holidays, births, redundancies), without falling into the role of close friend, where you might be unable to provide the critical, construc-tive comment and guidance needed in the supervisor role.

Ideally, there could be consistent contacts and condensed research supervision periods either in the university or in the home country. My own PhD was conducted part-time and at a distance (only 120 miles, but it often felt further) and I valued those long sessions discussing the chapter I had sent in advance. Students closer to home can pop in with a query, but can also be too reliant on informal contact rather than a systematic discussion of work. Formal contact needs establishing and maintaining. Commitment

is necessary on both sides, aided by both ground rules and learning contracts or some other form of agreement (see Chapter 4).

If supervisors can travel to meet and work with students in their own environments, they can become more aware of the cultural context in which students are working and so consider, for example, library availability, supportive contexts and practices, blockages, communication problems and, most importantly, cultural differences. This is obviously very costly to the university or us as individuals, but some programmes which cater for numbers or cohorts of distance part-time students arrange for supervisor visits. Many UK universities also have a regulation about periods of study in the UK, both to undertake the research development programme and to become at least temporarily immersed in the learning context of the university. If students can commit to a condensed period of work in the university at fixed points (initially on registration, once a year thereafter), then the supervisory team, plus all those other useful on-site contacts, can be brought in to help them with queries and any needs they have at different stages in their research work. This certainly was most helpful for one of my individual students, and was also organised for the international cohorts of students for the 'Summer university', the first stage of the Research Development Programme (RDP) for the large Middle Eastern PhD cohort programme with which I was involved for many years (see Chapter 10). As part of our ongoing action research with the students in this cohort, some reported the effectiveness of this immersion, which gave them the opportunity to spend time in the library, meet supervisors and the cohort, meet and work with others in the university and feel thoroughly engaged with their work.

Problems students and supervisors face that can be caused and exacerbated by distance include:

- difficulties of establishing working relations with the supervisor: face-to-face contact makes the agreement of ground rules and the establishment of rapport much easier;
- misunderstandings over communication, interpretation, frequency and kind of interaction;
- misunderstandings over methodology – arising from different cultural practices in research, or from the level at which the students are used to working, i.e. prior to their postgraduate studies;
- students' own learning behaviours and backgrounds – some students, including international distance students, could be used to accumulative learning approaches and transmission modes of teaching and learning, leading to a rather positivistic approach to research methodology and a tendency to regurgitate rather than question authorities; it is much more

straightforward to discuss, demonstrate, model and encourage varied ways of working, and develop more conceptual, critical, creative forms of research and analysis, if a face-to-face dialogue can be maintained;

- distance students and part-time students are often mature students who might be key figures in their own colleges, universities or professions. Receiving critical comment on their work might pose problems for them in terms of pride and status.

For those of us working with international or culturally diverse students at a distance, a period of time in the university, either as individuals or as a cohort, enables face-to-face relationships to clarify explanations and interactions, establishes workable modes of communication, and can ensure that cultural sensitivity is developed to avoid cross-cultural misunderstandings.

All students need supervisory guidance and induction into the processes of proposal development, scoping, research design, research approaches, analysis of and interpreting forms of writing, and some shared awareness of the demands, rhythms, potential problems and strategies to overcome them. Distance research students and particularly those from a cultural context other than that of the university in which they are researching probably need additional clarification and modelling of some of the communication and learning expectations which might be familiar to local students from their earlier stages of study. They also need induction into agreed methods of distance communication and supervision. It is wise to take nothing for granted, and to assume that in initial stages of interaction, and throughout the project where needed, the processes of research, writing, and supervisor–student interactions need to be discussed and negotiated, and renegotiated if they become confused. Issues relatively easy to resolve with someone in the lab or along the corridor can cause anxiety and misunderstanding at a distance. It is not insulting to ensure processes, practices, comments and suggestions are all fully understood and that, if they are not, the student has a route to question and ask for clarification. Email interactions, 'track changes', modes of feedback, and discussion in Moodle or Blackboard in a shared discussion space, with comments being added to explorations and expressions of research in progress, can all help clearer communication and progress and short-circuit the kinds of confusions which might lead to long periods of silence. In the online distance learning supervision course for the Oxford Centre for Staff and Learning Development, and another course on distance tutoring and assessing for master's students, participants learn to supervise and provide feedback to their own distance students through interactions in the discussion space, tackling questions which lead to discussion between them, other participants and the tutor. They also explore their own

interactions and feedback, reflecting on the way they phrase comments and how this could be improved for clarity and developmental feedforward.

In addition to the expected processes of reading into the subject to develop a research question or a hypothesis, or to own a question or hypothesis as established by a project group, it is important that students are reading into the literature on appropriate theories, current critical engagements and developments in their field, and on methodology and methods, so that they are clear what they will research and the appropriate ways to go about it.

When research students are studying at a distance:

- They should be expected to attend a systematic and well-organised research programme held in the university in which they are studying, or if there is a cohort of students, or funds permit, run by that university abroad in their own country or elsewhere if necessary.
- They need to ensure library and other information sources are readily available in their own country and that they have appropriate access to the online information sources of the university in which they are studying.
- They must be committed to the appropriately defined and agreed frequency of contact with their university-based research supervisor(s) and, additionally, if possible, they need a home-based supervisor who can address daily needs and difficulties (preferably someone with subject expertise but who also has pastoral responsibilities and abilities).
- They need to be able to interact with and respond to the dialoguing and interrogative prompting which serves as feedback on the language, expression of ideas and conceptual, critical level of their work, and encourages engagement, in order to think, respond and manage to improve the level of the work (see Wisker, 2009a).
- They need to go very systematically (as with home-based students) through the processes of definition of title, methodology, outline of the project and timescale; develop an awareness of stages of the project; make a commitment of time, space and resources; establish a scheme and patterns of work; and establish contact with others who can inform, help and support ideas and development of their research. This can include local support groups, critical friendship, or cohort-based groups. If they are isolated, then online critical friendship groups can be established between students studying at a distance. Distance students studying abroad benefit from developing such support groups to help their progress (see Bochner, Gibbs and Wisker, 1995).
- They need contacts with a research culture, both at home and in the

university. As supervisor, we can provide a version of a research culture at a distance over time, which can be more condensed, focused, intense and organised than when they are physically in the university.

- They need to work with their supervisor to negotiate, fully understand and work with the university's and the department's system of distance meetings, formal staged and less formal research in progress interactions and reports. Agreed frequency and kind of responses to queries and writing needs to be firmly in place. With distance, this cannot be casually left to chance and change.

▶ Coping with cultural difference and student research needs at a distance – some suggestions

There are several ways to alleviate potential problems of distance learning for culturally diverse research students:

- Set up compulsory research development and support programmes involving induction into the culture and learning paradigms, inception and development of research questions, and development of methods and training in their use. If students come from a learning culture of accumulative learning and deference to authorities, a development programme and specific supervisory focus on research-as-learning strategies should help to shift paradigms from largely positivistic and accumulative learning modes to the more speculative, creative and original. If students cannot travel to programmes, can programmes be taken to students?
- Set up on-site and distance individual supervisory meetings that enable a gradual engagement with the underlying questions and issues of the thesis, dissertation or project and the natural development from this into appropriate research methods and plans.
- Methods training in staged programmes should be developed and available not only on site but in distance learning formats to both help students establish their work, then discuss work-in-progress.
- Avoid the cultural imperialism of assuming knowledge from one culture is absolute, by entering into debate, open-minded discussion and exploration about this.
- Set up student support groups or encourage setting them up in the student's own country or home location.
- Enable distance contact to be supportive in a variety of developmental

> ways – chat-rooms, email discussions, email tutoring, videoconferenc-
> ing, web-cams, interleaving or 'track changes' with attachments, and
> distance learning materials.

- Encourage and provide opportunities for students and staff to be trained
  in the use of distance learning contacts and supervisory interactions.
- Put your distance learning students in contact with other academics in
  the broad international academic community – using email, discussion
  lists or contacts local to the student.

This chapter has considered useful practices with part-time students, those
working at a distance, and culturally diverse students (full- or part-time)
working at a distance. Many of these ideas are good practice *per se*, others
are more useful when working with distance research students in their own
context. With developmental programmes, institutionally supportive prac-
tices and sensitive supervisory arrangements in place, distance research
students are more likely to feel able to get on with their research, and be
successful in it.

▶ Further reading

Adams, J. and DeFleur, M. (2005) 'The Acceptability of a Doctoral Degree
Earned Online as a Credential for Obtaining a Faculty Position, *American
Journal of Distance Education*, 19(2), 71–85.

Antoniou, M. and Moriarty, J. (2008) 'What Can Academic Writers Learn from
Creative Writers? Developing Guidance and Support for Lecturers in Higher
Education', *Teaching in Higher Education* 13(2,) 157–67.

Creme, P. (2008) 'A Space for Academic Play: Student Learning Journals as
Transitional Writing', *Arts and Humanities in Higher Education* 7(1), 49–64.

Park, C. (2007) 'Redefining the Doctorate', HEA, January, 29.

Petersen, E. B. (2007), 'Negotiating Academicity: Postgraduate Research
Supervision as Category Boundary Work', *Studies in Higher Education* 32(4),
475–87.

14 Gender, culture, age and research studies

As we approach supervision, it might come as something of a surprise to consider that gender, culture and age can play such a big part in the supervisor and student relationship, but there has been a wealth of work carried out now into ways in which culture and gender differences, as well as learning differences, affect the relationship, hence probably the success of the research. Less work has been carried out exploring the ways in which age affects learning; however, the greatest growth area of those studying for a PhD in Australia is that of the over 60s. Some early thoughts on the more mature learner inform part of this chapter.

This chapter considers:

- *gender and culture in the supervisor–student relationship*
- *the gender-inflected nature of knowledge*
- *feminist research strategies*
- *some problems that could produce gender and culture clashes (and some ideas on avoiding or overcoming them)*
- *age and learning – the mature learner*

This chapter should be read in conjunction with Chapter 11 on learner and learning differences, and Chapter 12 on international students. Chapter 2 begins our discussions about undercutting the rather cosy dyad of student and supervisor, and recognising that operating in this relationship are issues of power and difference which need to be identified and managed so that both students and supervisors have a mutually beneficial, developmental, successful, professional relationship. The chapter looks *in the main* at women's experiences (Leonard, 2001; Moses, 1990), and to a lesser extent at cultural difference (Grant, 2003), since this is explored at further length in

Chapter 2 and Chapter 12, and begins some discussion of the implications for supervision of new research on how learning and learning behaviours change over time.

▶ Gender – women and feminist research

A number of gender-inflected issues might arise in supervisor–student relationships; others arise in relation to feminist research methods, and still others are due to institutional practices or social pressures. If, for instance, the student wishes to carry out feminist research and the supervisor is not supportive or aware of this, there could be clashes between them. Some feminist researchers have been accused of being too personal and subjective when they deliberately place the reflective and the subject at the heart of their work. There is also much evidence that gender and power relations in the supervisor–student relationship can affect a woman's chance of succeeding in her research, particularly at doctoral level. It is probably the case that gender plays, or could play, a large part in the necessary matching of understanding and approaches, of values and behaviours, which enable supervisor and student relationships to proceed harmoniously, or otherwise. Gender and sexuality might affect success.

In supervisory contexts, there is relatively little written about sexuality, but clearly this could affect the relationships and research. Homosexual, lesbian or heterosexual subject positions might affect research topics, theorising strategies and interpersonal behaviours. Whatever gender or sexuality-influenced differences there might be, professionalism is the key to successful working relationships. Supervisors should endeavour to understand the research questions of their students, work with them to produce a sound conceptual framework and achievable research, and support them in reaching their own research outcomes; in other words, they should empower, support, nurture, inform and enable the autonomous work that is necessary for research at any level. However, when gender or sexuality get in the way, supervisors must be aware of ways to avoid difficulties and handle any awkward conflicts.

Diana Leonard's *A Woman's Guide To Doctoral Studies* (2001), largely aimed at female readers, contains useful 'research-based information on how women are positioned inequitably within the supposedly liberal, cerebral world of postgraduate studies, and suggests how best to push back or move around problems and come out in front' (p. 2). Leonard considers the academic context in which women's research takes place to be conventionally masculine in itself. In the first instance, it was traditionally so – because

students, historically, were scholars and clerics devoted to the church, leading ascetic lives, unhampered by families and domestic responsibilities, the very things that women juggle as they study today. Leonard argues there is (in the early twenty-first century) a new kind of aggressive, business-like research context that also has little place for domestic balancing acts and for the feminist research paradigms within which many women might work. Feminist research practices *and* women's lives might be at odds, perhaps, with a 'new form of academic masculinity' (Leonard, 2001, p. 43), deriving initially from professionalism and most recently from managerialism. This new, hard-nosed, positivist edge could fail to recognise the credibility of research that seeks collaboration; moves in an iterative fashion rather than conducting a single 'hit' (i.e. pre-test/post-test) experiment or gathering data from people as if they were objects, not involved in the process; and does not impose research upon *subjects*, but instead grows from their needs and inter-ests and shares the findings. Even the shape and the language of research can differ along the extremes of a continuum, where one end is business-like and positivistic, and the other is concerned more with action research and feminist-oriented research. There is often a gendered dimension to these differences, although the differences *need not* be gender-inflected.

It could be the case, also, that the culture of research training is some-what at odds with the kind of creative, journeying approach to research that is possibly more common in much of women's work. Leonard believes this to be the case, critiquing research 'training' and new definitions of the manageable, definable project or scope of the PhD:

> the applications of agreed skills to defined problems, bracketed off from issues of individual, social and public purpose and with disciplinary knowledge treated as a dangerous residue rather than an intrinsic feature of knowledge production.   (Leonard, 2001, p. 45)

Leonard argues that there is a danger that development programmes and rigid timescales for the production of clearly defined PhDs arise from the application to the PhD process of forms and expectations deriving from rigid, limiting versions of masculinity and masculine world views. The results are reductions in the originality and quality of the PhD process and its products. So, although we might claim the PhD has moved on in terms of serving the needs of knowledge development and change, we nevertheless still produce 'the man of reason' and 'independent scholar' (Johnson et al., 2000, p. 45). While Leonard's work, like that of Moses and others considering women's research, largely focuses on the PhD, my own work with MA Women's Studies students and undergraduates involved in research projects has

thrown up remarkably similar experiences – some questioning of the
seeming rigidity of forms of expressions, subject matter and modes of
research more conventionally accepted within a largely masculinised (male-
dominated in a rather intolerant form) research culture in university study
(see Wisker, 1996).

It is this kind of recognition and exploration of the culture of postgraduate
study in UK and international (European, US and Australasian) universities
that contextualises and adds a philosophical element to our discussion of
issues and practices involved in undertaking research more generally, and
research in which gender plays a part in particular. It is possible that
exploratory, creative, interactive, action research that follows the pace of
those researched, involving the emotions and reflections of all involved,
could have little place in the cut and thrust of turning out PhDs in three
years, and producing theses or dissertations that rigidly conform to specific
layouts and defendable shapes which are defined by Leonard as hard-nosed
and masculine. However, if we revisit arguments from feminist critics such
as Adrienne Rich (1985) and Jean Cocks (1985) (Culley and Portuges, 1985),
we can argue against such rigid gender divides – 'reason and emotion are
not antagonistic opposites' they insist, denying suggestions that women
cannot be rigorous and critical in their work. Maybe some women (and men)
might want to carry out post-positivist – feminist or action – research. This
does not preclude them benefiting from research development programmes
and working with the rigour that timescales, word limits and layout rules
encourage.

In a more rigorously monitored climate (QAA, HEFCE, Australasia
completion funding), research cultures are better supported by developed,
often qualified supervisors, recognised as professionals and rewarded as
such, whose roles focus on and enable entry into academic cultures.
Additionally, research students are, or should be, supported by a sound infra-
structure instead of, historically, being left to fend for themselves on the
margins of academia. The increased focus on standards, quality assurance,
recognised research development provision and the professionalisation of
the supervisory role offer a context and practices to support all students. It is
particularly important, then, in a professional context, to ensure that every-
one has adequate access to facilities, and a well-managed relationship with
their supervisor based on mutual respect and commitment to mutual fulfil-
ment of duty (as well as to the experience of research).

These aspects of professionalisation should improve the experiences of all
students and, particularly, perhaps those who have been historically margin-
alised, such as part-time students, women, international students and older
students. The enhanced focus on professionalisation and quality should

provide a higher-quality context and experience, as well as opportunities to speak out, should difference such as age, culture or gender be experienced as disadvantaging them. Disadvantage for women students with domestic responsibilities, for example, could include a range of issues, including the timing of research development programmes (family mealtimes, or when no childcare cover can be found); expectations of full-time research (when domestic responsibilities demand part-time research); field trips; expected purchase, rather than loan, of costly computers; and so on. It is not that women are inherently financially worse off than men, though that might well be the case, but that domestic responsibilities have been shown to inhibit flexibility and earnings.

Domestic pressures certainly affect women's study and research at all levels. During 1985, I conducted a small-scale research project asking 45 students on two 'Return to Study' and one Open University Preparatory course to complete a questionnaire focusing on backgrounds, views and experiences of returning to learning. Twelve of these students were inter-viewed informally, in groups, about their learning experiences. Some expressed guilt. One said: 'I do feel pangs of guilt in that I am perhaps not contributing as much as I should to the running of the home, gardening and baking.' Another noted 'I have found guilt again for the self-indulgence of studying just for myself.' Others felt they shouldered an enormous burden of responsibilities which, not surprisingly, interfered with their study:

> The biggest problem that I foresee is that I am responsible for the house in general and if I don't do all the work I still have to arrange that it gets done by someone. This is the family woman's biggest disadvantage – washing, cooking, shopping, cleaning, general management.   (Wisker, 1996, pp. 7–8)

These are typical remarks from women returning to study at all levels. Many research students have similar experiences. Such comments about guilt and selfishness are examples of women's response to conditioning that leads them to view their study and research as stolen pleasures, self-indulgence, and activities that should be sacrificed when other duties call. While some manage to balance both domestic and study responsibilities, for others it becomes a debilitating drain on their emotional and physical energies. Much has also been written about the effects of women's domestic responsibilities effacing study time, for example Rudd's (1985) work on higher education.

Our recent (2010–2011) Higher Education Academy ESC subject centre-funded research on wellbeing, emotional resilience and doctoral learning has produced findings about women and the pressures they feel. Charlotte

Morris, the research officer on the project, sent me an email when writing up the findings, summing up the gendered issues with wellbeing, stress and resilience (24 May 2011): 'Perhaps unsurprisingly I'm finding that women students' wellbeing is disproportionately negatively affected as they make up a large bulk of part-timers and have responsibilities to juggle, not only that but part-time status means less access to facilities, support and being part of the academic community and then of course study affects their relationship dynamics, etc.'

Women within either heterosexual or lesbian relationship could find the contradictory demands of family and research enormously problematic. Whether supervisors themselves have children or not, they need to recognise the demands dependants present for women undertaking research. It is also the case, as Morris notes above, that because of such responsibilities women are likely to be juggling domestic work (childcare, elder care) with study, and the conflicting demands on time put pressure on them. However, women in the study Maggi Savin-Baden and I conducted (2009) identified ways in which women multitask, combining housework, cooking and part-time jobs with part-time writing. In a positive example, a way to overcome 'stuck' places in writing is to shift into domestic work, while your mind continues to turn over difficult thoughts and conceptual work. Then, when you return to the writing, things have become clearer.

The worth, value, status and volume of women's research has also been called into question. Women with domestic responsibilities have been seen variously as unlikely to produce such serious research in such large amounts fit for publication as their male counterparts, and *more* likely to do so – Margharita Rendel's work (see Wisker, 1996) suggests women with domestic responsibilities research and publish more than their counterparts. One reason for this could be the absolutely essential developed skill of balancing work and home demands. It is certainly the case that such demands can cause domestic and time pressures. If we hope to support and enable women with domestic responsibilities to undertake learning and research, we need to have our voices heard on the committees that decide on child-care, part-time study, car parking, acceptable research discourse, access to online research materials, and research development programme presentation times.

Jane Thompson makes the following comments on adult learners and learning opportunities: 'The organization and provision of courses takes very little account of the social, economic, cultural and political conditions of being female in our society' (Thompson, 1983, p. 81). This short-sighted culpability is a result of an imbalance in gender and power between policy-makers, tutors and students. Just because students might have coped as

undergraduates it does not mean women postgraduates find the research culture any more welcoming. It should be. Thompson notes:

> The career structure, the responsibility for organization and control, the arbiters of the curriculum, and the opinion leaders and policy makers who sit on bodies like the Russell committee are invariably men – men who operate firmly and squarely within the organizational structures, the cultural assumptions and the thinly disguised prejudices of patriarchal society.   (Thompson, 1983, p. 81)

I have been in post sufficiently long to have seen 'Return-to-Study' students move through their undergraduate courses, postgraduate courses, doctoral and then postdoctoral study. The ones who survive have often had to be ruthless about childcare, social lives, children and conformity *because of* times of access to postgraduate research programmes. They have had to confront expectations that they will have a computer and a modem to allow online research; beliefs that paying for a postgraduate degree, over time, won't cause an immense domestic conflict of financial interests; and expectations that they can balance unpaid domestic work, childcare and study, or paid work, childcare, and study. One ex-'Return-to-Study' (then OU, PhD) student appeared last week, seeking a postdoctoral research post. How did she complete the 15 years in between? Tenacity is a skill she could be employed for, alongside her research powers! She was offered part-time work; she gained a full-time research post. Good!

The range of issues that can be affected by gender include all the practices and processes of undertaking a doctorate or other piece of research, and afterwards, facing up to informal structures and cultures in which research is undertaken. Current practices regarding the employment of teaching staff and the kind of apprenticeship expected of graduate teaching assistants could actually operate against some postgraduates, alienating and silencing them. This affects men as well as women. Leonard notes the low status and low pay of teaching jobs accompanying graduate studies, indicating that this affects women in particular. I have seen men and women doctoral students equally out of the loop of decision-making, or left newly graduated and underpaid.

▶ Culture

Some culture issues *are*, of course, gender-free, but others are gender-specific and still others are additionally inflected by issues of race, and

racially and culturally inflected practices and views (where they exist) are just as likely to affect indigenous, black and Asian students as those from international locations.

Local, UK, black and Asian women are a case in point. Heidi Sofia Mirza (1995) and Diana Leonard (2001) argue that black women's success in higher education is not due to anti-racist, equal opportunities policies, but to the energies of the women. They have 'instrumental achievement strategies' (Mirza, 1995, p. 150). The motivation to 'go on' comes from the 'women themselves' says Leonard (2001). She points out, however, that identity politics deriving from beliefs in a kind of new colonialism, often actioned through such opportunities as access courses, can potentially prove harmful rather than helpful. Perhaps the recognition of black and Asian women students and researchers becomes less supportive and celebratory when their academic success deposits them in a competitive job market. Class and politics are important issues. Women's graduate and doctoral success is probably often class-related. International black women students, for example from South Africa, are or are likely to have been upper middle-class and, during apartheid years, ANC-funded. It is likely that various strategies such as 'Australia in the Pacific' (since 1985), and increases in numbers of international students after the lifting of visa restrictions, privileged middle-class students, while providing the higher education system with substantial fee income. With stricter visa systems in place for admittance into the UK, it could be the case that poorer students are missing out. A visa and a visa extension are expensive items. Poorer international students struggle to find funding to study abroad. This could also be exacerbated by gender. One MA Women's Studies student, 'Emily', left her child behind to study in the UK, found that she had to take low paid part-time jobs such as live-in caring (against Home Office rulings), and feared for her safety if she returned to Zimbabwe. She is caught in a poverty trap that students from richer countries or upper middle-class backgrounds can avoid. An Indian student undertaking her doctorate in biochemistry was forced to pay another £500 to extend her visa, and more rent – because her supervisor put reading her 'final' version of her thesis to the bottom of the pile until it was too late for her to get the corrections done in time to stay on. She was on a bursary from home – but it didn't cover the extended costs. The reasons for black and Asian women's postgraduate study might also differ from those of their *male* counterparts, as do their lifestyles and finances.

Diana Leonard quotes from her student, Akiko Nishio, studying Japanese postgraduates at London University. Nishio found that while men studied abroad to advance their careers and were probably sent by their companies, women's reasons for study were more varied, including escape from social

restrictions at home, career development and making the most of their lives while abroad accompanying husbands. Most were young and single (Nishio, 2001). Very similar patterns emerged from Jau Rong Chen's unpublished PhD (2001), which focused on largely Taiwanese postgraduates at the University of Warwick. Chen discovered that many women undertook study or research while accompanying their husbands, who were either working for companies or studying for doctorates. Still other women decided they needed to earn rather than study, so sacrificing their own development to help maintain husbands and families in a different cultural context. For several women students, cultural isolation is a real difficulty. Another student on a master's (MA Learning and Teaching) course left her son behind in China to study full-time. This is a sacrifice of her time as a mother. She has also found it impossible to gain paid work while studying because of visa restrictions, increasing the pressure on her to complete quickly and successfully, exacerbated whenever there are any difficulties in her study (such as the slow pace of the ethics committee).

It could be argued that coping with university research is useful training for future employment. However, this is rather ironic if it proves a financial and emotional burden. Hensel (1991) identifies how life outside work affects academic study and academic jobs, arguing that this can either help align dual home and work satisfaction (in the best cases) or lead to conflict of interest problems for women in particular, in both spheres.

> In academic work there is a high correlation between career-and-life satisfaction. The university, more than other places of employment, is highly influenced by life outside of work. In addition, universities are training grounds for future leaders and need to offer an effective model on how to balance family and career.   (Hensel, 1991, p. vi)

Hensel's study was an early comment on the 'work/life balance'. This plea for an effective model is rarely actualised in academic and research contexts. What women found was that tenure clocks ticked on while they raised families, falling behind in their research and publishing. To be effective, everyone needed 'a wife' to support an academic research career.

Leonard's study provides interesting generic information on issues such as employment after a doctorate. In the social sciences in particular, because academics are comparatively poorly paid, a doctorate might not always guarantee a higher paid job than that obtained by those without a doctorate (in non-academic careers). For women who have left their home countries and live in relative poverty to complete qualifications, as for any women who return to research, undertaking poorly paid part-time jobs to support it, the

sacrifice might not be worth the reward (except in terms of self-develop-
ment).

Gaps in knowledge (possible subjects for future doctorates) include infor-
mation on jobs gained by those who start doctorates later, and do them
while undertaking an academic career, and what exactly happens to careers
as a result of gaining a doctorate, that is, whether women go back to their
previous jobs or gain promotion. Leonard points out (2001, pp. 206–7), for
example, that many women actually leave science once they have gained a
PhD. This could be explained by the culture of working in science itself.
Becher et al. (1994) found that women had a negative response to scientific
experiment and research group cultures. Attitudes and accidental or deliber-
ate exclusion are issues women might face, but they could also face an
inhospitable research practice culture. Leonard identifies actual problematic
scientific practices, such as a culture of dangerous bravado with hazardous
substances (p. 207), which, she argues, is less likely to appeal to women, but
is seemingly expected in a largely male research group.

Motivation might also differ between the genders. Ingrid Moses (1990,
1993), conducting a national study, 'Barriers to Women's Participation as
Postgraduate Students', in Australia in the 1980s, found that while women
might be equally dedicated scholars as men, they were more likely to have
made a definitive decision about doing a PhD for its *own sake*, for their own
development, and were less likely to be concerned with high salary and
promotions, wishing to undertake the PhD as they had 'a need for a change',
and to take charge of their lives (Leonard, 2001, p. 66).

Other gendered and generic issues include those of space management,
paid work, and ensuring reasonable accommodation, income, grants and
scholarships. There are well-established records about difficulties for women
studying, ranging from their reception in the research context to sexism and
harassment in supervisory interactions. For instance, Sandler's (1993) 'chilly
climate', and sexual harassment, reflecting Diane Purkiss's (1994) recogni-
tion that 'pedagogy and seduction have been semiotically intertwined since
Plato (at least)' (Purkiss, 1994, p. 224).

▶ Gendered knowledge

As I have noted in an earlier work:

> Definitions of knowledge and of the worth of varieties of knowledge are
> also produced by the same white, middle-class Western men. Within these
> relationships of power, what tends to be either excluded, marginalised or

> evaluated as second-rate are the experiences of women and whatever
> might be described as women-centred or women-produced versions of
> knowledge. Feminist debate about women in higher education has
> focused on the patriarchal production and dissemination of knowledge
> which defines what is considered both legitimate for academic study and
> how to receive and deal with this information, the ideas (Culley and
> Portuges, 1985; Ramazanoglu, 1987; Klein, 1987; Gray, 1994). One impor-
> tant issue centres on the notion of what it means to be an academic, what
> academic subjects comprise and whether women-centred curriculum
> choices or alternatives within a patriarchally defined academic curriculum
> are integrated within it.   (Wisker, 1996, p. 20)

For the supervisor–student relationship, definitions of what it means to be an
academic, what subjects are suitable for research, and what methods are
appropriate could well be subject to gendered inflections. Women likely to
undertake feminist or women-centred research might meet a chilly reception
from supervisors who discredit feminist, women-oriented, knowledge
constructions and research practices. Stanley (1995, pp. 172–3) and Leonard
comment on how women toe the difficult line of tolerance of jokes and
putting down of women's research. Leonard comments specifically on diffi-
culties for lesbians on field trips, and for feminists giving feminist papers and
having their research paradigms undermined.

▶ What might women research into and how?

Many colleagues have found it difficult (in my own institution and in supervi-
sor workshops I have run internationally) to know how to evaluate the likeli-
hood of culture- and gender-related research projects being at postgraduate
level, being significant, and avoiding inflection of the personal, or construc-
tively incorporating the personal in accordance with feminist research
methods. Some research colleagues have also found proposed methods
(legitimate and well defined within feminist research practices) quite prob-
lematic. For example, research projects coming under question have been
variously on: experiences of women in the Chinese take-away industry,
using the researcher as a case study; female genital mutilation (clitoridec-
tomy); and life-affirming journeys towards the achievement of identity of
lesbians of a specific age group. These could be used as case studies to help
supervisors explore *how* to deal with gender-inflected conceptualisation,
knowledge construction and research practice. (One appears later in this
chapter.)

Victoria Robinson focuses on ways in which gender and culture inflect perceptions, epistemology and academic perspectives:

> Gender, ethnicity and sexuality are still not established as ways of seeing the world in the way that class is within politics or history. More posi-tively, though, if Women's Studies and feminist theory has only been in existence (in an institutionalised context) for twenty years, then even small shifts in mainstream thought can be seen as beginning to displace centuries of male academic bias and power.   (Richardson and Robinson, 1993, p. 6)

The construction, knowledge, articulation and organisation of knowledge from a feminist perspective are variously acknowledged by, and affect, the academy. The existence of Women's Studies can change traditional main-stream courses and also what is recognised as a suitable subject and method for research. However, radical change is distant, as Robinson notes:

> But even in areas such as cultural studies and sociology for instance, where feminist research is not only finding new answers but posing new questions about the invisibility and marginalization of women and their relationship to culture and the social world, a total intellectual revolution in the concepts, perspectives and methodologies of the subject area is far from being achieved.   (Richardson and Robinson, 1993, p. 6)

There are limited feminist interventions in the curriculum in the shape of specific Women's Studies accredited courses and modules at undergraduate and master's levels, where students are encouraged, supported and expected to undertake feminist research. More radical changes in theoretical perspec-tives and approaches, different constructions of knowledge and different discourses across whole subject areas, not just the women-labelled modules, can receive institutional and individual hostility. Rejection of feminist approaches is insidious and might well be seen to be personalised as an attack on the academic or student. Feminist researchers could be seen by those for whom feminist research is alien as encouraging students to conduct research and write in ways that are too personal and therefore irrel-evant, giving rise to comments such as: you are not writing well enough; you are writing too polemically, too emotionally, and in a disorganised fashion, with too much personal baggage, to be published; and what you seem to want included is marginal and trivial. This casts doubt on both the supervi-sor's and student's ability to use the discourse, analytical apparatus and research practices, and the rigour of the demands of the subject as inter-

preted through feminist perspectives and authenticated through feminist research practices.

Our feminist or women-oriented students undertaking research need to gain research skills and the appropriate discourse of their subject, as well as to become fluent in feminist research methods. If they wish to study subjects, ask research questions and seize research opportunities that are inflected by feminist perspectives and practices, they need to be creditable, in terms of a variety of strategies, particularly those of feminist research.

A women-centred, student-oriented focus enables the validation, support and refinement of feminist theoretical perspectives, approaches and expressions. For academic supervisors still receiving rejection slips and the odd broadside at planning meetings or assessment boards, however, the argument that 'the battle is won' (for recognition of feminist or women-oriented perceptions and research practices) is laughable. Kitzinger (1990) explores her experiences in psychology.

> When I write as a feminist, I am defined out of the category of 'psychologist'. When I speak of social structure, of power and politics, when I use language and concepts rooted in my own understanding of oppression, I am told what I say does not qualify as 'psychology'.   (Kitzinger, 1990, p. 124)

Her writing, she says, seems unacceptable because she uses feminist research methods and feminist expression and has involved herself in her work, which is both personal and politicised:

> Central to these rejections, then, is the sense that my work is not 'balanced' or 'objective', that it is an attempt to 'persuade' the reader of a particular point of view, and that it is politically biased – 'polemical' or 'ideological'. Suggestions about my writing style are frequent: that it should be 'moderated' or 'toned down' – that it should be less 'journalistic' or 'emotion-laden' … 'The text is replete with value-laden words,' commented one anonymous reviewer, 'a more scientific presentation is needed', wrote another.   (Kitzinger, 1990, p. 127)

Psychology is a science and, it is argued, a feminist approach to knowledge and its discourse is political, polemical, emotional – not science. However:

> An approach through a feminist perspective and expression which recognises oppression, context, the personal, is a legitimate one in all disciplines. Attempts to negate it as, for instance, 'not psychology' should be

> resisted. I could parallel this with dozens of examples from my own prac-
> tice within literature and education and colleagues' reports from other
> subjects including geography, biology, medicine and history. Each of us
> carries around 'guilty secrets' of rejection and comments about inappro-
> priateness and the 'wrong kind' of focus or discourse. We need to share
> positive experiences and build on the consolidation offered by women's
> studies.   (Wisker, 1996, p. 26)

I would love to argue that times have changed. If women-centred
approaches and expressions are constantly rejected in academic practice, it
will be impossible to empower students engaged in gendered research (not
all of them are, of course) to recognise their validity, and the prejudice and
bias of those who demote and reject them.

There are many feminist perspectives and research practices. One
concern is recognising the multiplicity of views and versions, and diversity of
context, response and approach. This is essentially a *set* of approaches that
refuses to just replace women-centredness or women-orientation for the
established critical orientation. Instead, it opens up diverse responses. It
recognises the issues and effects of class, culture, ability, sexuality, age and
other differences, without losing sight of the effects of gender.

Feminist research practices, questions, knowledge and construction are
likely to recognise:

- The importance of experience in constructing approaches and concep-
  tualisation
- How personal experience affects approach, reading, interests, argu-
  ments and expression
- Personal response, especially as it helps analysis and reflection
- A multiplicity of approaches and viewpoints critically arising out of
  different experiences and angles conditioned by class, context, race
  and gender.   (Wisker, 1996, pp. 24–7)

In terms of expression, women can learn to do formally what they do natu-
rally: integrate both reason and emotion (Cocks, 1985, p. 44). Emotion, feel-
ings and the self can be integrated with theory and exemplified in practice in
feminist research.

It can be argued that not only feminists or women use feminist-influenced
research strategies. Using the self as a case study, for example, has been
popular with several PhD, OU and MA students in knowledge management
or education contexts. The collaborative, sharing approach of action
research itself springs from the same kind of egalitarian, empowering, reflec-

tive orientation towards research. Perhaps feminist research strategies *have* had a wide influence, or perhaps feminist researchers find their work recognised as perfectly acceptable in situations where action research and more egalitarian, empowering, reflective practices of research exist. Either way, these changes are good news and could lead to:

- Treating others involved as subjects, not objects of the research, hence involving them in the research aims, sharing the processes and the findings.
- Collaboration, sharing what is being questioned and discussed with those who help produce the information, not speaking for others. Feminist research builds research questions with the cooperation of the research subjects. Feminist researchers check out transcripts, analyse findings in conversation with subjects, and share the final report and conclusions.
- Recognising the experience and position of the researcher as a person. This could lead to using the self as a case, using 'I', acknowledging and recognising personal involvement.
- Challenging and reinterpreting what is considered knowledge. The epistemology of feminist research might well differ from established research, that is, research conducted in the main by white middle-class males, usually normalised (not necessarily deliberately so-defined). Personal knowledge, a mix of the personal, of experience, as well as systematic research constructions of differing views and expressions of findings, might be in feminist research.

> Feminist theoretical approaches and expression in written or spoken assessed work and publications should not become a site for a wearing kind of battle: the slow drip of personalised disempowerment and humiliation.   (Wisker, 1996, p. 25)

In terms of feminist research practice, students would also expect to be non-intrusive, cooperative and collaborative; share the research with the participants; use 'I' to involve the personal; and might wish to be transformative either during the course of the research or beyond it. The transformative element engages with thresholdconcepts and conceptual threshold-crossing theories and practices.

In my research on conceptual threshold crossings in doctoral research I discovered that some of the women researchers with whom I worked indicated a 'learning leap' made in their work when they were able to unite their sense of values in relation to gender and equality, and their research areas.

These research areas were engaged with issues concerning women's posi-
tion, empowerment, employment and other related areas. The engagement
with an area which was value laden, and the deployment of feminist research
methods, produced in women I interviewed a sense of holistic concern, a
conceptual, critical, creative level of enquiry, and understanding. One of the
respondents working with women's empowerment groups and using focus-
group interviews, sharing the results with the women participants to feed
back into the empowerment group development, expresses such an overlap
between enquiry, method, subject and values when she says:

> And because of this concept, I was, I, I took, I took the learning and I took
> not only the learning – specifically the women learning – because it's
> something that the feministic agenda is saying that the way women learn
> is different from the way men learn and I took it and I united this all
> together and my concept is saying that there is something which, which is
> above the want, the want or the need to go, to liberate yourself or to be
> much more independent and the phenomena which are gathering this
> two, which are the correlation between this two, three agenda, the eman-
> cipation, the empowerment and the women learning.   (Wisker, 2006)

In feminist inflected studies

Effective feminist research is engaged with values, problematising estab-
lished views and perceptions, and in this respect is likely to involve concep-
tual threshold crossing. It tends to engage such underpinning issues as the
informing belief and world view that gender fundamentally affects ontology
and epistemology; offers a specific focus on interrogating and problematising
gender and power relations; recognises that ideology and engagement are
fundamental; questions being-in-the-world, i.e. the relationship between
mind and body, subjectivity, contextual and community construction and
representation of self and other; problematises given constructions and
interpretations of knowledge; and intervenes in traditional knowledge
constructs and expression to ensure a gendered inflection and the potential
for transformation of what constitutes knowledge, and how it is constructed,
represented, articulated, and actioned.

While feminist research and study might not lead to transformation and
activism, it could, and its changed perceptions could encourage activism and
action in others.

In research terms, it involves research practices which are non-intrusive,
collaborative, ethical, engaged, likely to engage at the level of personal expe-
rience, and which entail scrutinising and rescrutinising transformational

agendas. It is NOT 'male bashing', only concerned with women's or 'soft' issues. It is not 'intellectually exhausted' because it also engages in terms of gender in general and of difference, with issues and practices of othering, masculinities, queerness, inclusivity and postcoloniality.

This kind of research can be troublesome to students and readers/audiences (Wisker, 2006), but it is also challenging, risky, and transformational – essentials in effective research projects.

▶ **Women as supervisors**

Supervision is likely to be a role chosen by and for many women because of its similarity to counselling and pastoral care and yet, ironically, in the higher echelons of HE, supervising research students is a sought-after role. When seeking job satisfaction, positions and academic recognition, we might well choose to supervise PhD students as part of that development. Some of us (as women) might also seek to supervise *women* students, perhaps because of congruency of interests and perhaps because, once academically credible as a research supervisor, a female supervisor can support students taking more feminist, creative and alternative ways through a master's, undergraduate dissertation or PhD thesis. If we do this, we need to ensure students are rigorous, perfectly prepared, and able to articulate a defence of their research.

Research into supervisor–student relationships of power, such as that by Catherine Manathunga and Barbara Grant, has largely concentrated on cultural differences, and Diane Leonard's work, noted above, looks at issues where gender proves a power-related constraint for women. Another area of interest that emerges is that of same-sex supervision.

There has been research focusing on some of the difficulties experienced by women supervising other women, in Kathleen T. Heinrich's (1995) work. Talking of modes of relationships between women supervisors, called advisors in the US model, and their students, they determine in relation to other feminist literature that 'connected relationships are linked to women's sense of self' (p. 467), and explore relationships of mentoring and power, the transfer of mother–daughter relationships to the supervisor–supervisee context, and the importance of breaking the silences that cover these relationships of power. They explore a range of responses, from the highly supportive supervisor who nurtures, is a presence throughout and shares power, and the 'iron maiden' supervisor who is brusque, competitive, publicly and institutionally supportive, but not nurturing, refusing to let personal circumstances get in the way of the pursuit of doctoral achievements. Different students

responded to these different kinds of supervisor, variously finding the iron maiden strong when needed yet unsympathetic in personal terms.

> Iron maiden advisors' approach to advisement typified 'power over' rela-
> tionships they played by patriarchal rules, used their legitimate power for
> their own ends, focused on the task to the exclusion of the interpersonal
> dimension, and used direct confrontation to deal with conflict with
> advisees and associate advisors. Advisees assumed the constricted role of
> handmaiden roles to stay in relationship with this type of advisor.
> (Heinrich, 1995, p. 454)

Some preferred personal relations over completer-finisher and task-oriented relations – disowning the power – a practice which left their super-visees suffering from what Gurr would term 'benign neglect' (2001). 'Women advisees assumed too much responsibility for themselves in "power disowned" relationships with women advisors who gave over their legiti-mate power to focus on interpersonal harmony to the detriment of task accomplishment' (Heinrich, 1995, p. 454).

The professional friendship version's 'summary, professional friend advi-sors' approach to advisement typified "power with" relationships; they shared power with advisees, balanced task and interpersonal dimensions in a sensitive manner, and protected advisees by mediating with advisors or within the bureaucratic system' (Heinrich, 1995, p. 452).

Heinrich provides different cases of interaction and relationships, looking at the varying engagement with power, bureaucracy, the task in hand and the human relationships with the student. Some supervisors offer mentoring, some are effective institutionally, some permanently friendly, some enabling, and others too hands-on or hands-off to enable their students.

It is an interesting set of variables which operates more generally in terms of supervisor–student relationships, but in the woman-to-woman doctoral context is particularly telling if we consider the possible expectation that women will support each other, and ways in which they tend to transfer their relations with their mother on to the supervisor. The phenomenon of 'silent betrayal' (Heinrich, 1995, p. 466) would better enable our understanding of the complexities of these relationship dynamics.

▶ Gender and culture – delights, richness, conflicts and tensions

One of the research areas with which I have been involved considers ways in

which culturally inflected topics, perspectives, learning behaviours and contextualised research require culturally sensitive supervision and examination. An international woman student in Diana Leonard's study of education doctorates voices dismay at the ways in which both gaining a PhD abroad and integrating it with culturally inflected versions of women's roles have proved problematic and annoying for her. These are issues about which I feel we need to be sensitive when working with our PhD students, some of whom are the first in their context, economic, social, cultural or gender background to make that stride, and some of whom will not be either understood or appreciated for doing so. Leonard's respondent says:

> People [in Japan] do not like people who did PhD abroad. Have to pretend to be a fool and domestic and social life has shrunk.   (Leonard, Becker and Coate, 2005)

▶ Cultural differences

As MacKinnon and Manathunga (2003) and Manathunga (2007, 2010) indicate, issues of learning, literacy and assessment are culturally constructed and inflected by the dominant culture in which the postgraduate student engages with his or her research. We argue that this might marginalise doctoral students' work, see its expression as lacking, or force it into a Western mould which could limit its engagement and ultimate effect.

In our recent research (2009–2011), we focus on empowerment of the culturally inflected voice in a global context. We take into account culturally contextual issues and the potential for PhD impact, particularly where language, learning approaches, researcher identity, modes of interaction between student, supervisor and community, and ways of constructing or interrogating knowledge form parts of the learning dialogue. We also need to consider issues of language facility, particularly tertiary literacy, the language specific to higher-level study in a discipline which might hamper critical thinking and expression skills, and learning and interaction behaviours which are affected by culture and cultural difference

What becomes important for us to identify is students' and supervisors' experiences of ways of negotiating difference, enabling the significant, contextual, new and useful, while avoiding cultural imperialism, deficit models of learning and 'dumbing down'.

Three studies inform the research: (1) part of ongoing action research conducted by Gina Wisker with Gillian Robinson, Yehudit od-Cohen, and Miri Shacham et al., with a large (Middle Eastern) PhD cohort-based programme

(1998–2010) at Anglia Ruskin University; (2) National Teaching Fellowship-funded research (2005–2010) with international doctoral students, supervisors and examiners, conducted by Wisker; and (3) cross-cultural supervision research by Jennie Jones and Gina Wisker (2008–2010), University of Brighton. Our data derives from specific research activity conducted across all three projects, which involved face-to-face and email interviews with students and supervisors and focuses on cultural inflection and perceived related effect. We set out to consider what supervisors can do to support and empower students' culturally contextualised voices, recognising both their authority to focus (where they want to) on local issues and the need to acknowledge and ensure the global as well as local effect of such research. When supervising culturally inflected research we need to take into consideration possible underpinning modes of knowledge construction and the cultural inflection. This involves acknowledging: the importance of identifying context where it indicates the originality of the work and its potential for impact; culturally inflected topics, where they might be highly original in one context but perhaps less so elsewhere; the inflection of different terminology in a cultural context and the ways this leads to interpretations of the research topic and findings; and modes of research learning where these may differ culturally (Manathunga, 2003; Grant, 2008). Finally, we need to consider the impact or effectiveness of research, particularly doctoral work, where this might lead to transformation in the country of origin. However, as one of our supervisor participants and research colleagues pointed out, seeking the culturally inflected voice alone might well be a limiting factor, since: 'I believe that in almost every research we have to search for universal contribution to knowledge as we are living nowadays in a "global world" and not in a local culture' (Miri Shacham in email interview).

Sometimes culturally inflected topics can be misunderstood by those committees approving them, perhaps through lack of knowledge of their topicality, in context, and sometimes they might be subject to extensive querying which springs from the decision maker's own cultural comfort zones. As supervisors it is advisable to ensure students fully explain the reason for the topic and design of the research (in the usual manner), but to take a little longer over setting the context, if it influences the originality and the manageability of the project, the methodology and methods used, and the specific culturally contextualised impact of achievement of the research. For some gatekeepers, and particularly the examiners of a completed thesis, it could be tempting to apply a culturally contextualised lens to censor or reconfigure the topic and research question. Such actions could misrepresent the work, its originality of topic or question in context, methodology and methods, its contextual value and its potential culturally contextualised

impact. Some of the topics we have seen in our research have been popular and exhausted in one cultural context, but highly original in the context of another culture, and the cultural inflection could shine new light on familiar issues. These have included the failure of girls in school, bullying in the kindergarten playground, and the impact of women's empowerment groups and of regional colleges. There is considerable research literature on all of these areas, but not on the particular take on them which their particular (African and Middle Eastern, in this example) context encourages. It is important to consider each topic in the context of research literature and student interest, as well as, where appropriate, the effect of, or implications of, the cultural context in which the research is being conducted. To take a couple of examples: emotional intelligence training for the police in Tel Aviv must represent some similar but some very different contextual inflections compared with police training in Bury St Edmunds, Suffolk, and the strictures on women undertaking PhDs would be different in Saudi Arabia from those experienced in Brisbane.

In the normal way, we would scrutinise the topic, research question, academic research practice, process and skills, but we also need to ask fundamental questions about:

- How far are learning and teaching and research methods and approaches culture free and just good practice?
- How far might we be insisting on a Western/masculinist/positivist/post-positivist or other learning/teaching or research paradigm, just from familiarity?
- Is such insistence a form of cultural imperialism, or an enabling strategy for students to learn about diversity and flexibility of approaches and conceptualisation, presentation, etc.? Why does it matter?
- How can research both enable the culturally inflected voice and local influence, and also have more widespread, even global relevance and influence?

In the context of research conducted by researchers from cultures where it is considered that knowledge construction is a shared, community activity, we need to consider the appropriateness of the Western construct of the individual PhD (Grant et al., 2010). When critical response is thought insulting to elders or authorities (Biggs, 1991), we might need to reconsider the approach to the argument. Some students might not easily gain access to their population or 'truths' because of differences in culture, status, or insider/outsider position.

In our research projects (2009–2010, Jones and Wisker), some supervisors

reported differences between the accustomed and the expected modes of research and studying in the UK for international postgraduates. One said:

> I think some international students find the need to work and study inde-pendently very hard, because there is a very wide spectrum of what people expect from a PhD in the UK. That is very hard for people who come from a culture where everything is documented.   (Interview 10)

This respondent also focused on the issue of being critical:

> She found it difficult to be critical and to do critical analysis and would take things very much at first glance. She had very fixed notions, which were impossible for us to change.   (Interview 10)

Prior learning, topic, design, access and context are all influences on research, and supervisors of students engaging with culturally inflected research processes, topics or contexts need to take these into consideration throughout their supervision and beyond. Some supervisors identified benefits and some needs in relation to culturally inflected research learning practices and forms of expression brought by or encountered by the postgraduate students.

Our research has suggested the following effective practices:

- Increased awareness of, adjustment to, and where appropriate, fore-grounding of *culturally different contexts, learning styles, expectations and behaviours.*
- Acceptance of and support for *different learning approaches and research modes* where this is appropriate.
- Acceptance and support for *culturally inflected and contextualised research questions and areas.*
- Acceptance and support for some of the *culturally affected adjustments students make to conduct their research.*
- Need to ensure that students have appropriate access to *tertiary literacy support – for writing and examination.*
- Provision of *translation and editorial support and translator present at the viva stage to enable clarity of communication.*
- Appropriate selection of supervisor and examiners who have *cultural sensitivity to issues which grow from culturally affected topics, context and expression.*   (Wisker, Robinson and Jones, 2012)

▶ **Age and learning**

There are quite likely to be age differences between students and supervisors, but not always the expected differences of an older supervisor and younger student. With the increasing number of people seeking qualifications later in their professional lives, and many others seeking the self-development and self-actualisation which the achievement of a master's and a doctorate offer, it is not surprising that the greatest growth area in Australian PhDs is among the over 60s. We have considered both roles and dialogues in earlier chapters (Chapter 00) and the age differential is by no means the only one which can involve a rebalancing of relationships of power, since those of gender and culture, learning difference and personality difference also require that sensitivity. With students younger than yourself it could be the case that they will seek your 'parenting', to use the language of transactional analysis (Berne, 1964). This could involve requests and expectations for over-supervision, much hands-on work at the level of decision-making, approval of each step and even checking the text for typos and spellings. Some of this is, of course, normal in supervision but some of it can encourage excessive dependency, and students might find they have no space to make their own mistakes, take risks and take responsibility for their own learning and research. The movement to an adult–adult rather than parent–child relationship is therefore preferable. Here, you might suggest that students engage with some reading and respond to it critically to continue your next supervisory discussions, that they make some of the corrections on their work throughout the whole work, and that they plan and manage their own time and practices so that when you are involved in other activities or are looking at one element of their work they are not waiting paralysed for your response before they get on with the range of other work needed – from data gathering to reading, and writing the dissertation or thesis.

Establishing an adult–adult responsible and respectful relationship early on without leaving a student floundering because you are totally hands-off in your supervision can help develop independent judgement, which is necessary for postdoctoral work, employment and self-esteem.

Learners of a different age from you can also present challenges, and the range of research into the ways in which the brain works at different stages in its development is useful here. Most recently, research has been conducted into the myth of the deteriorating brain in middle age. Your 60-plus PhD students probably learn in a different way from you, if you are younger than them, and recognising that and working with it is an exciting opportunity. Your own brain changes with age and recognising how you

differ from your students should they be younger than you will also better enable learning interactions. Let us consider the older student. While they might not easily remember names, there are many things that they can now do with their more cognitively developed brains, which are well matched with the needs of research. *New York Times*' health and medical science editor Barbara Strauch (2010) has written about recent research which indicates that the middle-aged brain (of the 'new' middle age 40–68) is more flexible and capable than previously thought. It can perceive patterns and categories even when similarities are not obvious, bring together competing views and establish similarities and dissimilarities. People are apparently better at logical decisions, verbal memory, vocabulary, spacial recognition, logical inductive reasoning, financial decisions and social experience. These characteristics should prove useful in research because of the ways in which they enable the overview, categorisation, and establishing of long-term usefulness. Working with older research students to maximise these characteristics should be useful.

▶ Gender and power

A rather darker side of gender influences on the supervisor–student working relationship can include bullying (Adams, 1986), sexually oriented predatory behaviour and sexual harassment. Students need to know they are safe from such destructive and demeaning interactions, which can lead to women leaving their research and/or their academic job (reported as a more frequent occurrence than male supervisors and students leaving, while male on female bullying and harassment is also more frequently reported than same-sex or female on male – which is *not* to say these don't occur).

Some of the gender-inflected case studies given in the activity below can help us not only explore how to avoid gendered problems in supervising research students, but also to work out what to do should they arise.

Gender and culture-related case studies

Activity

Please consider and discuss these situations in relation to issues that have arisen over gender and culture – what should you do/what should be done?

(1) A student wishes to undertake feminist research and proposes to interview women about their lives using open-ended, semi-structured interviews. She intends to ask rather sensitive questions, but is working within a tight-knit lesbian community and is very clear that she will seek the permission of the respondents, check out the research questions with them, tape and transcribe the interviews herself and check them out with the respondents again, before encoding them, then extracting, in order to illustrate her exploration of life journeys among this particular community. Finally, she wishes to archive the material (names anonymised) for further researchers to use, as there is so little available on the gay or lesbian community. One or two colleagues on the research degrees committee have problems with the use of life histories and the seemingly rather unstructured flow of the work. The ethics committee is worried about allowing others access to the material.

Thoughts
The committee has problems both with the subject and with the research strategies.

(2) One colleague, more senior and male, is supervising a younger female colleague as director of studies. During the course of their supervisions it emerges he is beginning to suggest they meet in pubs and in his house in the evenings. *He* has just broken up with his wife and is clearly rather distressed, but *she* is worried about the changing nature of their relationship and insists that they meet as ever in the office for their supervisions. His next communication to her is to belittle her work and suggest that she is 'not up to this kind of research', that the work is ill-conceived, poorly researched and going nowhere. She is now in a state of embarrassment and confusion.

Thoughts
Even as a younger female colleague, she must be in a position to explain to him that the relationship was going in the wrong direction. She has obviously not responded as he wanted. They are colleagues and this produces *one* problem. The only way to handle it is institutionally but very carefully – they could close ranks. This is happening within the institutional framework so that is how it has to be tackled. Ask for a change in supervisor – but the problem with this is professional and personal, so it could have wide-ranging effects on both department and student. It needs some counselling, too.

(3)   Upon taking early retirement, Peter was commissioned to undertake historical research by his ex-company into the history of the company. He has been assigned a very much younger female member of staff as his supervisor. Sheila has a doctorate and is a specialist in organisational analysis. Peter has never been employed by a woman and finds it very difficult to take direction from Sheila. Sheila finds it awkward to advise Peter, who clearly has a great deal of experience but in fact is taking a rather prosaic surface-learning-oriented route through his research, documenting without asking questions or problematising, never being critical or evaluative, and never considering how and why decisions were made, instead recording events factually. Their supervisions always seem to end up with little movement forward and Peter as sure as ever that collecting and recording facts about the company he knows is the way to gain his master's degree.

Thoughts
Sheila needs to encourage Peter to problematise rather than accumulate. If eliciting interactions does not work she might have to seek support from a superior (not necessarily male) to let Peter know there are communication difficulties, or challenge these difficulties directly. There are also some issues here about age and gender differences – might they be able to talk them through and find respect for the differences?

(4)   The first draft of the first chapter from your international/culturally different/indigenous ethnic minority student arrives in your pigeon hole. The English has both expression and grammatical difficulties, sometimes seeming very pompous and academic (is it plagiarised?), or very much everyday colloquial language (is this the right kind of level of thinking?), or using some stilted language and really not expressing itself very clearly (is the student's English up to this? What are the tertiary literacy issues here?).

Thoughts
It is helpful here to point out that the expression needs to be the student's own, developed in a dialogue with the experts whose work they are reading, rather than merely repeating those experts. It is also important that there are severe problems with (even unintended) plagiarism, which could lead to the work being penalised and rejected. The student should sit with you to identify ways of incorporating properly academically referenced quotations from others, which are well discussed in the student's own voice. The student might need to seek local tertiary literacy

(language and writing) help to express the full quality of his or her ideas and arguments.

(5)   The research degrees committee is reviewing the proposal from an international/culturally different/indigenous ethnic minority student. They have major problems about the intention of this student to conduct research which aims at large transformational outcomes but intends to use mainly accumulation approaches – gathering large amounts of facts, using quantitative research methods and deductive research methodologies. One of the committee begins his comment with 'these people …'.

Thoughts
There are a few issues here, one of which is the potential that this is a racist slur on the work or ability of the international student. Your decisions about how to act will probably depend on your own culturally inflected responses, and the context. You could decide to tackle that head on, in which case you might permanently alienate this committee and this member, and they might not have meant any racist slur. Or you could find ways of moving the discussion back to that of determining the right research design to make the research manageable, which is the main practical point. The comment needs some response though (it is unforgiveable), so if you are not going to attack it head on you might say 'I am not sure what you mean by "these people"? It seems to me that we have an issue with research design …' or something similar.

► Further reading

Grant, B. M. (2008) 'Agonistic Struggle Master–Slave Dialogues in Humanities Supervision', *Arts and Humanities in Higher Education*, 7(1), 9–27.

Grant, B., McKinley, L., Manathunga, C., Knowles, S., Singh, M., Wisker, G. and Robinson, G. (2010) Symposium on Cross-Cultural Supervision, Quality in Postgraduate Research Conference, 2010.

Leonard, D., Becker, R and Coate, K (2005) 'To Prove Myself at the Highest Level: The Benefits of Doctoral Study', *Higher Education Research and Development*, 24(2), (May 2005), 135–49.

MacKinnon, D. and Manathunga, C. (2003) 'Going Global with Assessment: What to Do When the Dominant Culture's Literacy Drives Assessment', *Higher Education Research and Development*, 22(2), 131–44.

Nishio, A. (2001) 'The Experience of Japanese Postgraduate Students at the University of London, with Special Reference to Gender', PhD thesis, University of London.

Wisker, G., Robinson, G. and Jones, J. (2012) 'The Culturally Inflected Voice: Negotiation and Recognition without Dumbing Down, IDERN book (work in progress).

15 A little too close to home: supervising your colleagues and/or other practice/ professional-based research

The assumption that most students who undertake postgraduate research are aiming at an academic career is one much questioned by the figures produced, for example, in the UK by the researchers' organisation Vitae, 'What Do Researchers Do? Doctoral Graduates' Destination and Impact Three Years On' (2010). The stereotype of the young postgraduate working full-time in the lab for three years is also one questioned by the trend for students, sometimes considerably older than 21, to undertake master's courses and doctorates mid-career and to take as the subject of their study elements of their own professional practice. It is important to remember that many people undertake professional doctorates and master's courses mid-career because they want to have an effect on, or to research the effects of, their professional practice, as well as for their own self-development.

The rhetoric of the knowledge economy, and the equation between human capital and economic growth, is part of what lies behind the development of the professional doctorate, whether in health education, business or other professions, and while we might question that easy equation between human capital as a commodity, qualifications and economic growth, let us not forget that professional change and personal development are still great incentives for becoming engaged in research.

Servage (2009) and others have problematised the knowledge economy argument put forward by OECD educational policy (Rizvi and Lingard, 2006). Servage notes:

> Livingstone's *The Education–Jobs Gap* (1999) and Brown's *Opportunity Trap* (2006) are impassioned works that articulate the 'dark underbelly' of a too

robust faith in an ever upward-spiralling dynamic of higher education and economic prosperity: high-stakes individual investments and opportunity costs for many who embrace the rhetoric of the knowledge economy and pursue higher education, only to find themselves unemployed or under-employed. At the level of policy development, it is easy to aggregate indi-vidual consequences 'out of existence', and this tendency should never be taken lightly.   (2009, p. 777)

Many of us now supervise students who wish to engage with their own professional practice, perhaps including their clients, students, patients, colleagues, institutions, etc. as part of this research. We might also supervise our own colleagues who are engaged in practice-based, professionally oriented research. Some of the research which aims to address issues in professional practice and to make changes is action research. This chapter will look at supervising practice-based research, action research and the implications of this in practice, when those we supervise are our own colleagues in our own institution.

This chapter considers:

- *working with professional practice and institutional politics*
- *supervising practice – and professional-based research*
- *action research supervision*
- *EdD and prof docs*
- *supervising colleagues*

▶ Working with professional practice and institutional politics

Those undertaking research in professional practice contexts often wish to engage with their own practice, its effectiveness and changes they bring or could bring to that practice. They deal with current issues and problems in context and many of them seek change through their research. They might find Zuber-Skerritt's (2011, 2012) latest book entitled *Action Leadership: Towards a Participatory Paradigm and Action Research for Sustainable Development in a Turbulent World* as a start since they focus on action research for positive change in this 21st century. Organisational and other local change requires investment, buy-in and support from the organisa-tion (hospital, school, commercial enterprise, etc.) at every level. For those

students who are our colleagues, dealing with issues which might be polit-
ically sensitive will need some careful management in terms of confiden-
tiality. Students involved in encouraging change within their own practice
and their own institutions are faced with a number of social, cultural and
political issues. On the one hand, they may be expected to undertake
research into topics of importance for their own institution or professional
practice context. For those working in companies this could be a research
project on topics important to their company, while for those working in
educational establishments the research might be related to current areas
of concern. For each context there are stages to professional practice
research: establishing history, context, and identifying issues; building or
trialling practices or models; evaluating and reflecting on those models;
and making recommendations for future developments and actions. This is
explored in the four- stage model (below). However ambitious for transfor-
mational change, students need to develop a manageable piece of
research, or they could take too much on and not be able to manage the
whole process (see the analogy with a slice of cake in Chapter 2). They also
need to differentiate between research which satisfies the expectations of
master's and doctoral study and that which could be carried out in-house
to lead to a report. The function and the final shape of the written output
are different.

Some students could trial new curricula or practices; others maintain and
evaluate developments, for example, of the uptake and appropriate learning
use of IT, the acceptability of new policing strategies, the effectiveness of a
newly introduced personalised banking system, or the effectiveness of a
training programme for fire officers. All of these could be areas encouraged
by an institution, company or organisation to find out about itself as part of
the experience of a 'learning organisation' in practice. Some students might
be employed by, volunteer for and become engaged in community projects,
for example, on sustainability, recycling, or dealing with homelessness,
which form the basis of their research. There are benefits to working on
community-based or institutionally supported research because they are
'owned' and supported by the community or organisation who seek the
change and so are likely to be powerful contributors to that change. But for
some students, this could also prove to be a problem. Perhaps they could feel
they do not 'own' the project *themselves* because it has been requested or
designed by the organisation or community group; perhaps they feel pres-
surised to carry it out and complete, and feel their jobs are at risk if they
don't produce the expected results, while they could also be in a sensitive
position in relation to the conduct of the research. Another major issue for
mid-career professionals researching elements of their professional practice

is the form of the research and its product. Organisations or businesses might seek a report. Universities seek a dissertation or thesis. These two forms differ. Your student might need to produce two final pieces of written work to satisfy both.

There is a range of issues here. Practice-based or professionally oriented and located research is often felt to be decided by, controlled by and aimed at the benefit of the organisation which has commissioned it, allowed it to happen, and will use it. This could influence access, scope and the kind of research question, research processes, timing, outcomes, outputs and their use. Many students are happy to dovetail the requests and requirements of their profession and institution with their own practice and their research. Others choose to research their practice to improve it. Still others find the political, personal and structural issues this throws up extremely problematic. As a supervisor, it is important to help, enable, support and empower students in their work. Developing a research hypothesis to test, or a research question to explore, is the first stage in research which is suitably conceptual, critical and creative. They *do* need to be involved in and to 'own' the research, even if it is to be used by and useful to others in their professional practice. They need to produce a manageable, boundaried, achievable, sufficiently intellectually taxing, appropriately researched and written up piece of research for the award, even if (as is most probably the case) it is in rather a different shape from any *report* researched or commissioned by the organisation or community group, etc. You and they need to be sufficiently certain at the outset, during and on completion that it is viable and valuable in itself as a piece of research.

These issues concern the research project. Others include the methodology and methods chosen and still others, the difficulties and worries that might arise should the practitioner-based researcher be a colleague of yours.

Many practice-based researchers in the social sciences or health choose to use action research as a methodology because it enables them to involve others, for example, colleagues, patients, clients, and students as collaborators, sharing in and owning the research. Let us look at action research and its link to practice or practice-based research.

▶ Action research

Useful in practitioner research, action research resembles reflective practice and innovation plus reflection, but it is more rigorous. Often people reflect on practice and would like to try out innovations, address problems, and check on the effectiveness or otherwise of various elements of their practice.

This we do on a daily basis, but action research enables a specifically focused, researched exploration, action and evaluation.

Action research involves partnership and collaboration – between the population and researcher, and researcher and colleagues. All share in the research planning, processes and outcomes. In this way, it becomes a shared development and evaluative process ensuring the research population are *participants*, not *subjects* or objects, and full partners in the research. Reflection is a key element of action research, enabling learning to be embedded.

Action research is practical, participatory and emancipatory because it enables all to be aware of the research, and included as partners in it. It involves emotions and feelings, not merely mental and practical actions. It is interpretative because after an intervention or research-underpinned inno-vation, results and responses are interpreted, analysed and agreed amongst participants and researchers. Researchers take a critical attitude involving self-evaluation, development, professionalism and accountability. In action research, in order to ensure rigour and reliability, several research methods, or 'triangulation', are used to investigate the issues, matching the results of one method against those of at least one other. Action research encourages a sense of ownership and feeds into change. It is not scientific, in that it does not rely on experimental pre- and post-test models, and it is not 'done to' objects or a population but involves them in the construction and interpreta-tion of the research.

Action research operates in cycles addressing problems, interventions, innovations and questions arising from practice. The different steps involved include:

- Focus on/define problem/intervention/innovation in the real world and in context.
- Involve the organisation in which it will be conducted.
  Involve participants, colleagues.
- Produce general action plan.
- Take action – try out an intervention.
- Monitor the effect – using predominantly qualitative, but also quantita-tive methods as appropriate for the purpose of the research.
- Collect data.
- Analyse data and evaluate results.
- Share and debate.
- Next cycle of the research spiral. There could be more than two cycles.
- Organisation considers the research to inform action.
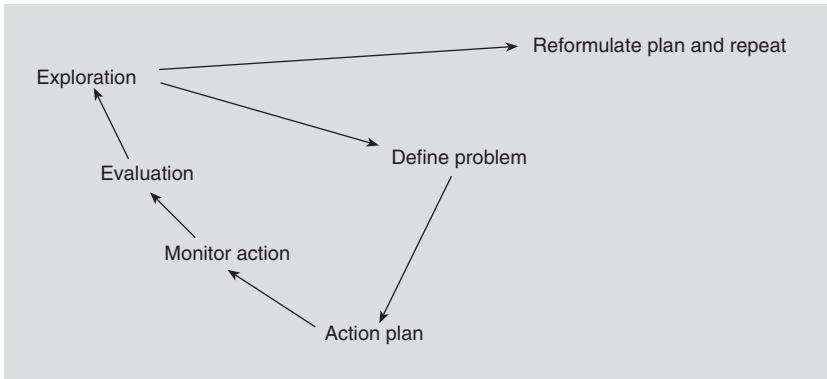
FIGURE 15.1   THE ACTION RESEARCH CYCLE

In whatever research students are involved, they will need to ensure they take full note of ethics and confidentiality. In action research, because participants are involved in the research, this seems to be less of an issue – nothing 'is done to' them without consent. However, the research is likely to consider feelings, emotions, individual experiences and responses, so adhering to ethics and confidentiality processes are essential (see Chapter 7).

Why choose practitioner-based action research?

Practitioner-based and practice-based action research could provide insights into:

- the working practices and interactions of people;
- the working practices, ethos, problems of the organisation;
- the research students' own working practices;
- your own practice and that of others, in a beneficial manner.

It is useful to consider whether there could be any problems, for example:

- genuine buy-in from the organisation, and willingness to take part and listen to results;
- confidentiality and access to participants as subjects;
- openness of people about what they reveal;
- intrusiveness, position and power – as researcher and participant;
- the phenomenon/case/issues and how these change in the process of action research;

- the need for more than one cycle in the action research spiral – will it take too long?
- Can they do anything about what they find out? Or should they? Should someone else? How can results and findings lead to action?

If your students look likely to select action research or practitioner-based research, then suggest they consider these questions:

- What kind of practitioner or practice-based research would you like to undertake in the future, or are you undertaking now?
- What kind of action research could you use? Which methods would you use within it and why?
- If this is action research, how will you go about its planning, ensuring confidentiality and collaboration, etc., and setting up cycles affected by each other?
- How will you share results and make them public?

Practice- and practitioner-related research

Researchers need to consider issues of research design, access, funding and the ability of the professional practice-based research to actually action changes, evaluate practices and make recommendations. Problems could arise at specific points: (1) during the research; or (2) while writing it up. At point (1), students need to consider whether their potentially trans-formational or change aims are achievable within the bounds of the research dissertation or thesis, or could lie beyond these bounds. It could be that others might be informed by their research and so develop changes, solve problems or action new practices or programmes, but that the *research itself* cannot be concerned with trying them out and evaluating them.

In effect, there is a potential four-part model. If your students are involved in professional practice research they are unlikely to be able to focus on all four parts: (1) background of the issue and theorising, (2) development of the programme/change, (3) evaluation and reflection of the effectiveness of that programme/change, and (4) building something new. Instead, they could find it more straightforward to really focus on a couple of the stages, where establishing a history and context can be the background for exploring an issue and developing a process which is tested, and suggestions for the future would take place beyond the research itself, possibly being carried out by those in power in the organisation, by other people or groups in the appropriate contexts, or by the researchers themselves in their own practice, beyond the research process.

▶ **Which elements describe your student's research?**

It is possible that a student's research could include all four parts, but it is more likely that it will:

(a)   Use history, experience and other evidence to identify a problem or need (1).

(b)   Use history, etc. to identify a problem or need then suggest solutions (1 and 4).

(c)   Use own experience of having developed a model/programme, produced, tested it out and evaluated it. Some background (1) would be included but this trial is the focus of the research. The research resembles an experimental model – scientific or social scientific (mostly 2 and 4).

(d)   Describe a programme, model, etc., evaluate its effectiveness and make recommendations for further action (mostly 4).

(e)   Identify a problem and its history, evaluate theoretically or in terms of responses, feelings, others' solutions to these and draw up some guidelines, which could inform/change a programme (1 leading to 2).

One successful colleague identified a problem (in health promotion), gave a brief history, built a programme, described it, tried it out, recorded the events, and evaluated its effectiveness and participants' responses (1, 2, 3, 4). Attempting *all* of this is a popular first move amongst professional practitioners, but it is *usually to be avoided* as it is *usually* over-optimistic and over-extended.

Combining all four stages is possible, but if not very tightly focused, a research project including all four could be too huge, and fail to really produce research outcomes. Professional bodies often want problem definition, solution building and testing, evaluation and recommendations, i.e., exactly this shape, for a report. A dissertation or thesis is more do-able and manageable when its scope, construction and implementation are more modest and tightly focused, where the change might well take place as a result of or in response to the research.

In the course of designing their research, students can be advised to consider which elements – 1, 2, 3 or 4 – are manageable for them. If pressured by work, students could decide that 3 and/or 4 (model/programme and the evaluation, plus recommendations) are outside the boundaries of their research for this award, but could lead to a report for their professional context.

This effectively splits the work, as it would also split the writing-up process, and a student might find he or she is then muddled or torn as a result. It could, however, help to solve problems of funding: a manageable

piece of work should be completed even if funding runs out. If the programme or project fails, the student can still write up the research, despite institutional politics, and perhaps keeping confidential and crucial information away from management colleagues. The *report* can make recommendations while the research details methods and reasons for them, suggesting others take the work forward, so indicating further work, gaps and boundaries.

We conducted research into the experience and work of our mid-career part-time professional PhD students, which has been published (Wisker, Robinson, Trafford, Warnes and Creighton, 2003). Supervisory dialogues were a major source of research data on our postgraduates' and supervisors' research projects. Dialogues were conducted with the PhD students during the first, second and third stages of their research development programme. The dialogues focus on the experience of researching practice within their own institution in order to identify a need for change, maintain practices, evaluate processes and behaviours and/or changes. For all these students, subjectivity/objectivity is an issue. For some, using the self as a case study provides a rich opportunity to put their own experience legitimately into the research. For others, incorporating a log or journal offers reflection without publicity. For some, there are issues with identifying or evaluating practice *or* of causing change, affecting their conceptual frameworks and choice of methods. Our research programme attempted to identify such issues and help/empower students towards the achievement of appropriate change/ outcomes, if manageable, in their research project.

Extracts below represent some of the issues and experiences faced by researching their practice.

Student   I want to search specifically the Heads of the Departments in Seminaries who presented the middle level management. And I want to understand, I know because this is my job, the problem that in the same time I need to be simultaneously in contact with the high level management – there are very very wide level, higher than me – and with the subordinate. It's something like sandwich.

Supervisor   Yeah, a sandwich for the middle managers that are in the middle.

Student   Yes, yes. And I want to understand which characteristics help them to be simultaneously in contact with the two levels.

Supervisor   Ah, so how do middle managers go about their role which is a role that's upwards and downwards, a sandwich role?

This student has entered middle management and wants to look at the phenomenon of role conflict, demands made on *middle* managers and ways of overcoming problems *because* of being in the middle.

Student   … because I was one of them. So I try to, I start to understand that it's some point it's very very important, because that I came from this, the level of the subordinates.

She reflects on her own privileged position. Having been in the same situation as her (now) subordinates, she feels she understands their needs, but now she is their manager and suddenly expected to solve all the problems. She mainly wants to look at role conflict solutions for *women* managers.

She researches the role-effectiveness of women in senior management positions in her own teacher training institution.

One of the potential difficulties of researching your own practice emerges here as closeness to the subject matter. She could be too involved to establish real perspectives about management. However, she could also be close enough to have unique insights, much enthusiasm, and then even to use *herself* as a case study.

In research into ongoing practice, there is always a danger of the study turning into a personal reflection or a report. In order to ensure it is research, it is important that students conceptualise the work, develop conceptual frameworks, and identify informing theories and the arguments in the field, relating their own work to all of these.

Another student notes difficulties of conducting research into her own practice in a work context where colleagues find the research intrusive, resent it, or are confused by it. In this supervisory dialogue, she identifies the moment when she realised her *practice* needed to be researched because it would be valuable to others, but that in order to conduct the research she needed to clarify theoretical background and inform her work with that of experts. This is part of turning a practice development into a piece of action research from which can develop results specific to the context but useful to other practitioners in other contexts. Other difficulties, however, were produced by her position as teacher/facilitator and by her colleagues' views of the reasons for and usefulness of the action research.

Student One of the things that I found out was that I talked about this business of insider and outsider and how your own university … can make you feel as an outsider because when you come up with something and you think well this needs to be developed and you need support, people think instinctively, well it's her

> work, it's her benefit you know and we want the students to concentrate and I am saying this is part of a development and I cannot do it alone, I need support hence the project had to go extra curricula because my own colleagues had blocked it. The students wanted to work with me because they were excited about working on something new.

This student has now successfully completed her PhD. A major problem was the untangling of ongoing work. Teaching and staff development consultancies resulted from the success of the programme she developed and from this actual *research* process, which led to a thesis and publication. As this was a piece of practice-based research, it was difficult to decide what element of the practice to formally research, which theories to use to scaffold and direct the research, and where to stop the research process for the PhD outcome, because action research by its nature is cyclical – each successive cycle fuelling the improvements in practice in the next. A practice-based piece of action research has to stop somewhere for the demands of the award. Transformational outcomes can follow beyond the award, and so can further research. Students involved in practice-based and action research need to define, decide and defend their decisions about the scope and extent of their research project, their 'slice of the cake' in terms of ongoing work.

Management of a sufficient and coherent piece of practice-based action research allows a snapshot of the problem, issues, question, situation and innovation, which in themselves could otherwise flow on without the kind of researched, evaluative shape to the work that can be shared with others.

Students undertaking postgraduate work and undergraduates on work projects are involved in at least two projects:

(1)   The research that follows a proposal, underpinned by a conceptual framework. In practice this research journey involves peaks and troughs, risks, disasters and revelations. It comes to some sort of conclusion.
(2)   The writing of the dissertation/thesis that accompanies the research but also has a more coherent final shape; tracking plans, actions, reflection, findings and evaluations, and finally presenting the whole as a coherent, well-shaped thesis or dissertation, underpinned by a conceptual framework.

While (1) is more of a journey with maps and some trips down variable byways, (2) is more like a piece of architecture, seeming, in retrospect, to be built logically on firm foundations and finally standing up coherently as a completed piece.

For those undertaking practice or work-related research there is a *third* process (see Chapter 3). They are at work. The research relates to their work or professional practice and can be affected by it and affect it. A student seeking professional and practice-related outcomes could experience local political difficulties, or perhaps produce a practicable output lacking the speculative, theory-based, conceptual level of a dissertation or thesis.

EdD and PrD (professional doctorate)

Educational doctorates and professional doctorates have been developed to link industry/business/the professions and doctoral-level work. As Servage puts it:

> The rationale for the establishment of the professional doctorate is that it is needed to address gaps between the skills and knowledge that have conventionally been associated with doctoral-level learning and what is presently required by industries and employers in knowledge economies. (*Studies in Higher Education*, 2009, p. 766)

They have been developed in a manner which enables scaffolding and structuring of a doctorate, which has much of the cohort base, support and development functions found in, for example, US doctoral programmes, and supports the development of a coherent body of underpinning reading and theorising, as well as the development of an individual thesis exploring a professional practice-based research area. Maxwell (2003), Neumann (2005), Powell and Long (2005), and Scott et al. (2004) comment on their establishment and growth in the UK, US and Australasia. Others (Boud and Tennant, 2006; Green and Powell, 2005; Lester, 2004; and Neumann, 2005) emphasise their focus on links with industry, competencies and research skill developments appropriate to the workplace, as well as themes and concerns which feed directly from and back into the workplace, so ensuring that doctoral-level thinking and research-formed deliberations can benefit industry and business (Green and Lee, 1995). Interestingly, given international development with regard to both commodification and massification of higher education, Servage's work raises issues of the functionalist model of higher education on which most of the discussions about professional doctorates are based. The rather straightforward equation between acquisition of higher education qualifications and a growth in the economy is based on notions of the knowledge economy and learning and development as commodities. Research for its intrinsic value in deepening and enriching understanding, enabling social justice and personal development, rather becomes left behind in the process towards growth and human capital investment. We

need to remember that those undertaking professional doctorates will have ideals and stresses, as do those involved in any doctorate. Their desire to contribute in a research-informed way to their work in their workplace might be to enhance their chances of promotion, but is equally likely to be integrated with their engaged desire to solve the problems of their work, and develop and prove the effectiveness of processes and practices in which they believe. In the midst of any rhetoric of commodification and economics there are *people* undertaking the research who are deeply, personally, as well as professionally involved in it. Issues for professional master's and doctoral students are many. Work stress can get in the way of research; professional politics can direct it or prevent it as much as intend to use its outcomes. Students can feel torn between many different issues and contexts. Our supervision of Prof Docs and EdDs, and those undertaking professionally oriented master's and PhDs, will need to take these complicated professional, personal and political contexts, intentions, practices and outcomes into consideration at each step of the supervision and research process.

A thematic edition of the *Australian Universities Review* on Postgraduate Studies/Postgraduate Pedagogy (1996) focused on the developments in Prof docs and the theoretical nature of doctoral education. Here, Green (1996) argues the importance of curriculum in discussions of the professional doctorate, seeing the professional doctorate, unlike discipline-based degrees, as focusing on professional practice that leads to new relationships between the university, the profession and the workplace. In these writings and in the ongoing Australian Research Council (ARC) research project (1997) they take further the project in Evans and Green (1995), in which theorising is seen as a 'necessary first principle in meaningful and effective innovation in postgraduate research and training' (Pearson, 1999, p. 276).

Both the EdD and the PrD have been developed in response to the need for professionally oriented research into practice. Their staged, accumulative nature, and, for the PrD, often the deliberate use of colleagues as supervisors, highlights and helps to overcome some of the issues amounting to conflicts of interest (i.e. between professional colleagues). In some instances, the PrD might lead to a thesis that resembles or serves the purpose of a report.

An Anglia Ruskin University description serves as an example:

The Professional Doctorate differs from the PhD in that it:

- is interventionalist in its relationship to the topic being investigated;
- adopts a descriptive and/or developmental approach to research using an applied, problem-focused, or action-based approach;

- obliges candidates to become involved with implementing change in the organisations with which they are involved;
- recognises the importance of internal mentors, not only as hosts but also as sources of knowledge and expertise for, and the dissemination of, research findings;
- enhances the development of candidates through undertaking and use of their research.

These features may appear in any social science PhD, but they illustrate the uniqueness of the PrD because of its imperative to involve candidates in advancing professional learning in their own working situations. Its status and rigour, like the PhD, is reflected in the production of a research-based thesis.   (Anglia Ruskin University *PrD Handbook*, 2003, p. 1)

Within the PrD the relationships, where appropriate, between peers, client–worker, employer–employee and inter-organisational, are the forum where research findings can be valued, and mutual expectations will exist regarding the achievement of organisational goals. The context has a central role in the development of the learner/researcher since it provides the source of research and it is where the findings from that research are disseminated and implemented.   (Anglia Ruskin University *PrD Handbook*, 2003, p. 2)

Aims and objectives of the professional doctorate programme.   (Health and Social Care, Anglia Ruskin University *PrD Handbook*, 2003)

The PrD (H&SC) will serve the needs of professionals in the field of health and social care who wish to undertake doctoral level study to:

- Advance knowledge and practice through the generation of original knowledge
- Provide apprenticeship in research methodology so that candidates are enabled to develop those research skills that have an impact on health and social care practice and education, which enables them to undertake research assignments
- Enable candidates to display a high level of academic rigour, and the capability to produce work that is acceptable for publication in refereed journals
- Prepare candidates to assume increasing responsibility for strategic planning, decision-making and leadership, and to fulfil a developmental role in their respective organisations
- Improve the quality of their services as practitioners and leaders

- Expand their theoretical understanding of educational, management and professional practice in health and social care
- Foster and develop inter-agency working and learning through the promotion of research in practice and services
- Evaluate the impact of interventions on internal mentors or services
- Work in partnership with service users
- Increase the esteem of their own organisation – raise the organisation's reputation, which in turn will aid recruitment and retention.

As a consequence of meeting these aims and objectives, candidates who are awarded the PrD will possess 'expert knowledge' in their chosen field of research through acknowledged scholarly achievement. They will also have made an original contribution to the understanding and application of contemporary education, training and management practice through solution-centred research. This will be demonstrated through having generated models, and other explanatory evidence, that display originality of ideas and independence of thought. Thus, the title will be an appropriate measure of their professional and academic achievement.

This is an example of a description in a handbook. Most universities would have something similar, which explains precisely the nature of the course structure and the kind of professional doctorate students would be undertaking, as well as the normal rules and regulations about due dates, lengths and other processes.

Structure of a PrD
Professional doctorate programmes vary in relation to their context but usually involve workshops, perhaps residential times spent in a cohort, dealing with and producing working papers which build towards a thesis or are separate from it, and producing a thesis. The health professional Prof Doc at the University of Brighton brings professionals together several times a year over a four-year period. Alongside the development of their own research, they engage with generic doctoral workshops on, for example, developing a conceptual level to their research, writing with confidence and preparing for the viva.

Supervising your colleagues
Students on Prof Docs and EdDs might well be your own colleagues, as might others who are working in your discipline. For the former, the issues and context of the university could be a little close to home, while with the latter, the main issues would be about the question in the discipline rather

than engaging in the actual institutional practices. For some students, researching their own practice or the policy, practice and mechanisms of their own institution provides mixed delights and problems. They might meet barriers to their research from colleagues who resent the possible prying and intrusion into their own practices that it suggests. Others could feel threatened by what the research might reveal, and even jealous at the time investment or/and intellectual recognition related to the undertaking and achievement of, in particular, master's or doctoral work. Students could face anything from over-intrusive and controlling to resentful and obstructive colleagues and bosses. More doors could be opened, or more could be shut to them. Of particular interest is the potential minefield for both the supervisor and the colleague of being actually supervised by one of your own colleagues. Because it is inevitably inflected by authority and power, being colleagues can enable or dangerously hamper the working relationship of supervisor and student, and the student's own research. For those of us supervising our colleagues, the institutional dimension of the supervisory relationship, the politics, are more critical than ever, because we could expose problems which don't go away, upset working relationships, breach confidences, and get stuck in a tension between the current state of practices and the ethics related to these practices, and any explorations, findings and suggestions which the professional practice-oriented colleague produces. Ethical considerations and a careful balance between personal, professional engagement with the student and his or her work, in the overall context, should help us with this situation.

It is a very uneasy relationship, but one increasing in new universities, as colleagues seek higher degrees and can perhaps gain some element of fee waiver in undertaking them 'at home' rather than at a different institution.

Relationships are important here. Maggi Savin-Baden (Coventry University) comments:

> For me, the difficulty in supervising colleagues is complicated because the notion of 'being a colleague' can mean all sorts of different things. First it can mean supervising someone in the same department or school and that brings challenges about the power relationships. For example, I was supervising somebody in the same school whose line manager expected that doing a PhD was an extra and not part of academic life. The result was that if I encouraged that student to take study leave or time working at home the boss didn't approve, criticised the student and often gave them more teaching – which was tantamount to sabotage in my book. There are also issues about when and where supervision happens at work and whether it is okay for them to pop their head around the door a few

times a day when they are feeling stuck – which is okay for some of the time but not at others. Questions of boundaries seemed to become blurred in this relationship.

The other type of colleague is the person you got to know through conferences and through shared interests. These may be older than you, more experienced in their field, but not yours. Becoming a PhD student with you then changes the relationship and I find that there is often quite a bit of circling around one at the beginning (despite doing all the ground stuff) which is about sorting out the boundaries and power issues. Having said that, I feel I have done much better with this type of 'collegial' relationship so that after the PhD we have become friends and worked together as equal partners. (Personal email communication, March 2004)

When we are involved in the supervision of colleagues, issues of confidentiality and the power of the research to affect practice, which might well also include our own practice and that of our close colleagues, will all be issues for consideration, as will the context, the opportunity to engage with certain topics and to effect changes as a result of the research. Some of the case studies below might be useful in thinking through the supervision of colleagues, PrD, EdD and those engaged with professional practice research of all kinds.

► Case studies

It may be useful to consider the following cases with your student. How could you and they manage the process?

1   Student H is undertaking a Master's in Education considering the need for structure and effectiveness of continuing personal development provision. This felt fine at the beginning. He is a mid-career teacher in a school. This was his interest. Then, management became aware simultaneously of government interest in CPD, and his project. Now he has been given the task, for the school, of identifying needs and evaluating the CPD to suggest further developments. His colleagues, previously happy to share their feelings and experiences, are unsure of 'who' they are talking to – which side he is on (management stooge/researcher?).
2   Student C works to discover how and if nursing students are aware of the usefulness of their studies about, and in, research practices. She seeks curriculum change. She is a senior lecturer. In her lecturer role she sends

out questionnaires but receives a 10 per cent response rate so decides to re-contact the respondents, this time owning up that it is for *her own* research. They are more willing to respond because it will support *her.*

3   The research group has been awarded funding to develop an acoustic-based engineering product to improve visually impaired people's ability to use their hearing to find their way around. As a group member, your student seems confused about where his piece of work might fit in. If he succeeds and uses the funding, an affordable product could be produced. However, can he continue the research if funding dries up or if the product is faulty or rejected?

4   Your student is studying specific management relationships in a partner institution in another country. Halfway through her data gathering, the institution breaks off all relations with your own, leaving your student banned from gathering data and in a difficult legal position about publishing or writing up.

5   You and your student are colleagues and are working on an institutional development of which their research is a part. Work is coming in late, and of poor quality. Of course, the student is subject to the same work pressures as you and so you are sympathetic. But it is embarrassing to discuss (1) the work, which the institution needs to be completed, and (2) the quality of the research so far.

These case studies focus on issues of:

- **Funding**: the shape of research and professional practice-oriented activities; topic; usefulness, outputs and research quality; shape and kind of research output.
- **Politics**: the role of research in organisations and in relation to post-graduate or undergraduate demands.
- **Interpersonal relations** between colleagues.
- **Rank**, power.

They should produce some thoughts about professional practice-based research in practice.

► **Further reading**

Boud, D. and Tennant, M. (2006) 'Putting Doctoral Education to Work: Challenges to Academic Practices', *Higher Education Research and Development*, 25, 293–306.

Brown, G. (2006) 'Degrees of Doubt: Legitimate, Real and Fake Qualifications in a Global Market', *Journal of Higher Education Policy and Management,* 28(1), 71–9.

Neumann, R. (2005) 'Doctoral Differences: Professional Doctorates and PhDs Compared', *Journal of Higher Education Policy and Management*, 27(2), 173–88.

Rizvi, F. and Lingard, B. (2006) 'Globalization and the Changing Nature of the OECD's Educational work', in H. Lauder, P. Brown, J. Dillabough and A. Halsey (eds), *Education, Globalization and Social Change* (Oxford: Oxford University Press), pp. 247–60.

Servage, L. (2009) 'Alternative and Professional Doctoral Programs: What Is Driving the Demand?' *Studies in Higher Education*, 34(7), 765–79, www. informaworld.com

16 New ways: supervising creative research work and the PhD by publication

> Mine for the taking, but I must enter the banquet as a fellow guest, follow the protocols and then enjoy the feasting.
>
> A good supervisor for the creative researcher is one who is willing to stand between the traditions of academe and the explorations of new landscapes in educational practice, recognise the cultural value of the arts as a capital investment to education and help to negotiate the way forward for the student, however small that contribution needs to be. (Curtis Tappenden, email discussion, July 2011)

These comments from a self-identified creative PhD student working on a topic involving creativity offer some insights into the tensions between the creativity and flexibility needed for research, and the structuring and nurturing role of the supervisor. I decided it would be appropriate in this chapter to include my dialogue with Curtis (with his wholehearted support) as a more creative response to the issue of what a creative PhD student and his supervisor experience and believe is possible, and how we can help manage the creative postgraduate process into an original, expressive, yet also passable form.

It could well be that the structure and shape of a creative dissertation or thesis are very conventional, but the creativity might also spread into the form as well as the processes and topic. A question for us as supervisors is how far our student can be creative and still conform sufficiently to pass, how their creativity can enable new and exciting work to flourish and how the shape and form of the output also change.

In many universities, students are now undertaking research that leads to creative outcomes and outputs differing in both process and product from

the more conventional dissertation or thesis. More often than not, creative work is accompanied by an analytical account that more closely resembles the conventional format, linking the creative piece to the theories, concepts and arguments underpinning it, and which it expresses. Additionally, some research students, probably mid-career professionals, now seek to gain PhDs by recognition of their publications. In these cases, the shape of the PhD is different from that of the more conventional form, but the outcomes – original, well-argued, publishable research-based work – are the same.

This chapter looks at supervising creative research, and it also considers the PhD by publication, where this now established format has itself altered the expected shape and even the intent of the traditional PhD by recognising within the form of the PhD the previously published work of the student.

This chapter considers:

- *supervising students engaged in creative research-based projects*
- *supervising the PhD by publication*

▶ Supervising students engaged in creative research-based projects

Let us first consider what kind of research a student identifying as creative might want to undertake and how, and the challenges this offers. Current thinking about supervision at doctoral level tends to favour a functional model of supervision (Lee, 2008a; Wisker, 2005) in which ground rules, institutional conformity and well planned supervisory relationships operate in the context of limited time to completion and restriction of acceptable formats of expression for the PhD. Less has been written about supervision models for undergraduate and master's dissertations, so most of the discussion about form, process and supervision in this chapter should be adapted for your supervision of undergraduate or master's students.

Lee and Green (2009) consider supervisory models of apprenticeship, discipleship and authorship, and Watson (Watson and Schuller, 2009) suggests the student is a co-inquirer or co-producer of knowledge. Working with highly creative students often requires creative analogies and the practice and processes which enable these to unlock, enable, empower and articulate creative ideas, roles, findings, expressions and arguments. Without risk and challenge, my Swedish scientist supervisors tell me, there is no research, and no new knowledge; without creativity, research stagnates, it is paralysed

in a mode of repetition and replay. Busy work continues but this might be merely functional and descriptive – cataloguing, noting and referencing. It can develop into the scaffolding that holds the soap bubble of clever think-ing, of creating something new; however, if there is only the scaffold there is no really exciting new research or outcome, and if there is only the soap bubble it will float off and dissolve. Creative research and work at all levels needs scaffolding, articulating, 'nudging' and enabling, and empowering. Some of this enabling and empowering comes from the scaffolding processes, which are aimed at enabling someone who creates in disparate ways but finds it harder to form these creative constructs into a recognisable (and passable) shape. Some of the enabling comes from nudging, and cele-brating the need to fly and explore. The 'system', including the processes and the final form of the expression of the research, might need to stretch to accommodate the creative work.

This chapter explores ways of confronting the challenge and the concep-tual threshold crossing leading to doctoral work which is conceptual, critical and creative (Wisker and Robinson, 2009) in production terms (Sullivan, 2005). Indeed it could be argued that the space of the doctorate could be one of carnival (Bakhtin, 1981), which tests the constraints of the conventional shape and language of expression of the PhD. Frick (2010) argues that 'Doctoral study is inherently a creative endeavour', although Moriarty and Reading (2010) note that 'Enabling students to make links between their sources for inspiration and the development of their creative practice can sometimes be difficult, meaning that students fail to see their personal creativity as having a meaningful effect on their practice, their vocational ambitions and personal development.' Creative practice of various sorts in the PhD is variously seen as essential, difficult to enable and scaffold, and sometimes difficult to assess (Biggs and Buchler, 2008; Amabile, 1988; Danvers, 2003; McWilliam, 2007; Jackson, 2002).

It is useful to explore the experience of working with a few highly creative, more radical PhD students and, in particular, as case studies, creative women's studies students and, latterly, a performance poet, sketch-book artist and radical educator who has developed the image of the jester to identify his often carnivalesque, highly creative work. I would like to argue that the liberty and excess which the carnivalesque allows as creative space needs to be matched by a clearly, conceptually, choreographed mode of supervision, which both enables the excess and radicalism of the carnival spirit, yet also helps the student scaffold an acceptable thesis of merit. Conceptual choreographing involves matching learning behaviours, and developing enriching and enabling dialogues and feedback exchanges, which enable expression between supervisor and student.

Research and its outcomes are not merely presentable in standard formats of the dissertation, thesis or project report. Indeed, historically, artists, musicians and others engaged in creative work have researched both the contextual background to their work and the ways of expressing the idea or argument they wish to explore, represented in their final work. In response to recognition that research and its outcomes may take many shapes for many ends, university systems are also changing not merely to accommodate but to encourage and help develop and recognise such creative work. This is particularly important for students undertaking dissertations and theses in the arts, which include products. Artists and writers tend to define their research processes as discovering through creating – the research is the writing, painting, weaving itself, and embodied in the process and the product. Our tasks as supervisor are to manage and help choreograph the creative practitioner's research and written work plus creative product, if there is one, so that the work communicates, sufficiently conforms, and expresses its newness. There could be creative tensions between protocols, rules, expected shapes to the work handed in for assessment, and the creative process and expression with which the creative researcher is more familiar in his or her own practice. By agreeing to undertake a dissertation or thesis for a qualification, however, they are at least signing up for some managing and shaping, some conformity and communication, while the demands and expectation of the acceptable dissertation or thesis might well have to be stretched and tested to enable the students to really achieve what they intend or what they discover they are achieving.

▶ Some examples of creative formats and processes

At some universities, undergraduates are able to produce dissertations in English involving the development of a sequence of short stories or poems, accompanied by analytical and critical discussion, showing the development decisions made in the process of this work and the ways in which it exemplifies and articulates creative, critical aims and outcomes. Students undertaking undergraduate and master's dissertations in women's or gender studies have traditionally been able to produce creative products for their dissertations. On the MA in Women's Studies at Anglia Ruskin University, students were able to undertake a video dissertation, co-supervised by someone in media production and their Women's Studies supervisor. The video dissertation included three assessment products based on research, on creativity, and on conceptual, reflective and analytical work. Such a linked series of assessment outputs enables the creative, critical,

conceptual and communicative, ensuring that the creative research is demonstrated and articulated to achieve the learning outcomes.

They produce:

1   a log or journal of decisions made, methodological choices, their research journey;
2   an analytical, theorised, critical discussion/commentary
3   the video or creative product itself.

The log is an ongoing exploration and reflection accompanying the stages of the students' research. Initially, it involves a record of brainstorming creative ideas, the argument or issue they wish to pursue through their work, and ways in which the creative format develops as an expression and exploration of ideas or issues. During the course of their research, they reflect on the development of skills and achievement, or otherwise, of elements of their research and creative production. They use the log to articulate questions they are asking and the choice of creative expression, the problems encountered, surprises, decisions made and changes in decisions, as well as their own experience and emotional responses to their work. This in itself is part of the research process, because it engages with the thoughts, experiences, memories and feelings of the students, and so gets to the heart of the ways in which they generate, develop and finalise their research and its creative and analytical expressions.

The analytical commentary, or discussion, resembles a *theoretical perspectives* chapter. Here, students enter into a dialogue with the critics and theorists whose work underlies and drives their own, with similar or previous work that is the context for their own work, and alternative possible theories or interpretation with which their own research and creative development are in dialogue.

One student wished to explore her experience of relationship with the maternal and ways in which relationships with her mother and her own role as a mother can be creatively expressed. She did this through the reproduction of a creative piece of stitchwork based on a gift: an apron from her mother. She read widely in the French feminists: Julia Kristeva, Hélène Cixous and Luce Irigaray, and experts on mothering and motherhood Gilligan and Chodorow, as well as in the work of artists, particularly in stitchcraft. She incorporated critical responses to the feminist critical theorists with whom she worked, in the actual stitchwork around the apron, and also engaged critically in a dialogue in her accompanying piece. This explored and argued how mothering involves handing down conflicting ideas which women need to respond to both critically and in an empowering way; and

how there are different notions of mothering and of women's work, women's expression, of relationships between mothers and daughters and tradition, and so on (it was extensive). She also explored and expressed how this piece of stitchcraft related her to her mother's versions of what she 'should' be like in the mother–daughter relationship, and how these expectations engaged with the theorists. This was a tripartite exploration of the personal, the creative and the analytical. The final product is fascinating, but alone, without the log of developing arguments and the analysis, it would just be an apron with writing and stitchwork on it.

Another Women's Studies student produced a glamorous dress made out of pan scrubs and other domestic items, making a comment about conflicting representations of women and roles for women – from the glamorous to the domestic. Several students have been involved in the production of video dissertations. In each of these instances, they have produced a log of their questions, decisions and problems, etc., and an analytical piece engaging with feminist critics, with methods of video production and ways in which video can engage with the issues and questions they have. These too are tripartite pieces. The video is a final product of theorised and personal research.

My examples here are from Women's Studies. Discussion with colleagues from more practical arts reveal similar examples: children's book illustration projects, installations, sculptures, and photography sequences were each accompanied by logs of the creative process and reflections, and an analytical critical piece. While artists might argue their work needs no communication, since it stands alone and speaks for itself, I would suggest that if a student seeks an award for the work, it needs to be researched. The analysis and log serve as a means of communicating its negotiation of meaning and expressions to others (not least to examiners and the academic community).

For students engaged in a variety of creative pieces at both undergraduate and postgraduate level, it is crucial that they are supervised in ways that help them bridge the gaps, as such, between the creative, the reflective and developmental and the analytically critical, so they can find a language with which to express their ideas and arguments that is both creatively sound, expressive, and at the level of the award. The supervisor then has a fascinating but difficult task working with the students' creativity. You could begin by helping and enabling them to brainstorm and explore their initial ideas and issues, perhaps on one side of a page or a flipchart/whiteboard. Next they could explore what creative product might enable them to engage with these ideas and outcomes, and finally, which theories, concepts, theorists, areas of reading and argument can underpin and inform their work, and how much of the personal might appropriately be included. Supervisors would expect to

encourage the creative expression into an appropriate form, to ensure the student reads and engages with the theorists and critics, expressing themselves analytically and critically in relation to the creative piece, in order to produce really reflective pieces. These are three different kinds of expression and each needs development as part of the research as it is finally presented for assessment.

▶ Video dissertation example

'Anya' is a creative painter and installation artist who has worked in her adult life in the country of her birth, South Africa, mostly concentrating her work into productions of her own art and into teaching others to express their ideas through artistic production in workshops. Now living in the UK, she had a tremendous sense of homesickness for the South Africa of her past, but this was mixed with political tensions and confusions, and other ambivalences about memories of herself in relation to her family. What has this personal piece got to do with research? She wanted to explore and express: 'Going home: the influence of home, family and memory on identity'.

This could of course take many forms in a dissertation or thesis, so let us consider how we might explore different readings and expressions of this idea. One student might decide to interview a number of people to explore in a semi-structured way their memories of family, home, and the link between this and identity. Another might wish to pursue the question through statistical responses to questionnaires about identity, context, origin, background and family, and another might like to explore the expression and representations of these themes through the work of a novelist, poet or filmmaker. But Anya wished to use her creative background and also to develop some further creative skills in the process. She decided with her supervisor that the production of a video dissertation was the best choice. Together they brainstormed the issues and questions with which she was concerned:

- family
- home
- context
- memory and its dependability, or not
- identity
- guilt
- longing
- feelings that relate to memory and family

- self and identity formed from the family and home and, in spite of them
  or as a rejection or response to them, influenced overtly and covertly.

The creative element of Anya's work was, she hoped, going to not only
enable her to explore and express what she was conscious of, but take her
into new areas to explore and allow her to express unconscious contradic-
tions, longing and guilt, good and bad memories, recognition of how she has
been formed and what she misses, and things she needs to face. But this was
an academic piece of work, and the structure and rigour demanded of an MA
dissertation were important. She and her supervisor were determined the
dissertation structure was going to be exactly the enabling frame around and
upon which she could grow, nurture and express these ideas, arguments and
explorations. The ideas and arguments form one part of the work.
Brainstorming and decisions were recorded in a journal as the ideas took
shape. Similarly, in part of each supervision, the supervisor and Anya
discussed exactly what kind of creative work could help her explore, express
and articulate her ideas and arguments. Anya decided she would make an
art video, since she had only basic video skills and many art skills. They
worked out that this would mean using some of the strategies of art in the
construction and texture, shape, content, images, etc. of the idea itself.
Another brainstorm session followed – how might her idea enable her
engagement with contradictory responses? She had a constant daily sense of
travelling back home and feeling like a stranger there, but needing to go. She
wished to be again part of her family, and felt she was an individual now,
had moved on. They decided it would be necessary to re-visit South Africa
for some of the footage but that other footage could be shot in the UK, since
many of Anya's feelings about her origins and home constantly reasserted
themselves here. Her sense of identity was formed in both places, reflected
here and now. The supervisor offered to travel to South Africa, but such
perks are hard to fund.

   Anya's decisions about how to shoot and what to shoot are all recorded in
her log. One of the important things she wanted to express was a contradic-
tory set of memories, another of returning to clarify then test them, and
another to record her sense of identity as made up of memories, current
thoughts, fantasy about the past, and a desire to return, and reflect on that
return. She wrote of this and decided she would take footage of herself, her
return, the home and family, a family gathering and herself, and her in the
UK. It would be necessary to intersperse the two, to cut them together
somehow. This was a matter for video technique but also for creative
expression.

   But what happened to the analytical elements? The third element of the

work was constantly ongoing. In order to ask her questions about identity, family, homeland, memory and creative expressions of these, Anya carried out literature searches, did a great deal of reading and reflection on that reading, critically, analytically and discursively, both establishing the critical framework of the theories, theorists, and themes she was using, and establishing a personal engagement with the arguments and conflicting ideas they represented in terms of her own questions and creative explorations. As such, she got into a typical research dialogue with her theorists – some critical and some creative – as any other research student would. Dealing with the decisions about the developing creative product, engaging in a skills development creative activity with the other supervisor in media production, and with the Women's Studies supervisor in terms of feminist film making and the arguments, caused her to move backwards and forwards between the three processes and products: log/journal; creative video work; and analytical, theoretical perspectives and engaged argument. Each moved on. One of the roles of the supervisor was traditional – ensuring that Anya developed timelines and was aware of how she reacted to them, changing them if necessary, enabling Anya to explore and express the right kind of shape for the outlet of her arguments and ideas; sending reading her way; putting her in touch with other students and others who have produced video projects and creative projects; and meeting regularly for supervision to consider ongoing work and discuss any hitches or developments. Notes were kept of supervisions and Anya recorded decisions and thoughts, etc., in her log. As the elements of the video and the chapter on theoretical perspectives/engagement with the theorists and theories developed, the supervisor looked at and discussed these with the student. Both supervisors worked together with Anya over the video development.

In the event, the shape of her final product was even more creative than had been imagined, because of the desire to express a sense of return, yet the intrusion into the everyday of memories, a sense of the past lived in the present, and the integration of this into identity. Anya produced a video that was cut to replay returns to the South African home, and her living in her home in the UK. She used family stills and current family video taken specially on location. She talked over it, used sounds of family members and used expressive music. The written product was also creative. She and her supervisor decided there were two products but that they worked together and were not so easily separated. So they were interleaved, cut together and bound as a single piece. You could read the log/journal straight through on one colour-coded route through the product, followed by the analytical piece, or you could read the two in parallel, since the pages were cut together and interleaved.

For assessment purposes, the video, log and analytical piece were appropriately produced and presented. With sensitive, informed supervisory dialogues throughout, Anya was also able to produce something unusual and creative, even in her log and analytical piece, as well as her video.

This extended case study serves as an example of the ways in which supervision can aid a student in producing an appropriate, creative dissertation or thesis at the right level, adhering to the university demands for assessment; shape; length; engagement with literature and defence of theory, theorists and methods; coherence; contribution to knowledge in the field; and so on (but something which is *also* highly original and creative).

Master's and PhD work in literature and art offer opportunities for a variety of creative practice which can be articulated through the research and writing process. We conducted some research into ways in which students of literature and art were enabled to cross conceptual thresholds in their work and achieve creative, critical and conceptual work, through the process of their supervised research (Wisker and Robinson, 2009). We noted that

> Students of literature and art are frequently involved in dynamic mixtures of reflective, creative and analytical work, data gathering from a range of sources including collections, archives, the public, writers or artists, alongside more traditional developments of literature reviewing, analysing and interpreting text or art artefacts. Such work is often socially and culturally contextualised and engaged, cross-disciplinary, and can involve the production of creative work.   (Wisker and Robinson, 2009, p. 319.)

Because of the nature of the creative learning leaps the students were making we found that threshold concepts and conceptual threshold-crossing theories enabled us to explore and identify experience and some effective 'nudging' practices. We initially used theories of threshold concepts (Meyer and Land, 2006) and the crossing of conceptual thresholds (Kiley and Wisker, 2006, 2008; Wisker and Robinson, 2007). We found that some overlap in threshold concepts in both literature and art appeared with notions of imagery, representation and irony. 'In terms of the study of literature, students are expected to engage with, understand and embed work which uses essential concepts, to date not defined as threshold concepts. These include representation, engagement with the implications of context and culture, and expression in language and form' (Wisker and Robinson, 2009, p. 318). Some of this has been articulated by subject experts (Childs, 2005; Dentith and Ellis, 2000; Eaglestone, 2000; Quality Assurance Agency, 2007).

In art, engagement with metaphor as a form of representation is seen as the 'making of informed choices about imaginative and intellectual approaches' (Sullivan, 2005), which can be enabled through the use of sketchbooks and journals (Robinson, 2006; Robinson and Hulston, 2007). For both disciplines, the ability to theorise and articulate at a critical and conceptual level could be seen as evidence of the crossing of conceptual thresholds. This evidences the quality and achievement of the work and goes beyond the creative act itself. Key overlaps between the disciplines of literature and art are in the threshold concept of representation and can also be seen in irony, which depends on perceiving a gap between expression and meaning, and metaphor, where one idea or image stands for another – expanding and nuancing it. Francis Kelly, discussing writing, notes:

> metaphor is risky, that its use acknowledges the inability of words to be stable, clear and unequivocal, and opens up the potentially slippery slope of association. Yet metaphor's ability to make conceptual links between disparate things also gives it potential in research writing. This has been recognized by Elbow (2002), who has argued for more inventive and creative methods in the teaching of writing.   (Kelly, 2011)

Involving our students in reflection on the creative and shaping processes of a PhD enables a self-aware engagement with the process of research and development of research identity.

▶ Identity and process

> I had no preconceptions surrounding PhD, and how a creative might handle a theoretical and not practice based one. I was surprised that I was constantly being referred to as a 'Creative'. All are, surely? But herein lies the distinction. Having moved through and into academia by the prac-tised-based educational world of art and design, my training and learnt skills base has been taken for granted. The way we think, the experiential learning cycle according to Kolb, the Constructivist theories applied to the processes of innovation in art and design. These are second nature to those whose daily vocation involves them. What does not occur in the same way is the high conceptual breakdown of thinking itself (metacogni-tion) or the testing of narrative content, considering the angles of inter-pretation of language and deed. New philosophical words like epistemology and ontology suddenly enter the considerations of the creative thinker, who like da Vinci, or Galileo, Newton or Blake even, must respond in a scientific way. The reflexive is usually considered as

> transferred to the object of creation rather than the creator. Change is
> what you do to your artefact not yourself. As an artist I realised new chal-
> lenges.   (Curtis Tappenden, email discussion, 2011)

There is a fundamental difference being realised here, that the change is
in the researcher not the artefact. However, the changing ideas and the
production, analysis, interpretation and expression of findings are all
changes in the thing itself – the research process, product and expression. He
goes on to consider how a supervisor might work with a student whose work
is explicitly within or on creativity:

> The dialogue entered with a supervisor or supervisors is not new. It is an
> extension of tutorial, presentation of ideas or work, or simply informal
> chat. The supervisor needs to realise who they have before them. That
> they might not think by the rationale of more academic structure – the
> writing of essays, the seminar, even, can play heavily on the perception
> and expectation of both parties.   (Curtis Tappenden, email discussion,
> 2011)

For Curtis, identity is bound up with being creative, and the challenge of the
PhD is to find space and form for the creative 'play' which is seen as rising to
new challenges. This is a complete shift of perception for the perhaps more
conventional, less creative supervisor, while a more creative supervisor, in
the student's field, will recognise what is being perceived and enacted here.
Whoever we are, we need to find a way to enable the creative processes to
be engaged, channelled, and to flower within an acceptable, assessable
form.

► How are creative research outputs examined?

As an external examiner, I have examined two creative PhDs that have
clearly benefited from sensitive, creative, supervisory advice throughout, in
terms of the ways in which the actual innovative, creative expression can be
engaged with by analytical response in a (relatively) conventional way. One
performance PhD comprised a thesis which, on the face of it, looked just like
any other, and a CD-ROM of the performance student's work. The thesis
engaged with theories of performance art, the search for the self in perfor-
mance, expression of the self through drama, expression of issues of identity
and memory, and, finally, the part technology played in enabling or enhanc-
ing performance art. The student was a performance artist who used her

own body in drama and performance (thus engaging in the feminist and performance issues of the body in space, expression, and performance – self as subject). She also used technology, specifically video, which had been digitally re-worked. One of her comments is about engaging expressions of the self, identity, memory, gender and performance with ways of recording and rewriting it. The video medium enables this expression.

I was fascinated to also receive a standard PhD thesis linking arguments about drama, performance, self, technology, video, expression, identity, memory and all the theorists and theories, coherently worked through in an argument. This all operated with reference to the CD I was sent so that, in effect, I read the thesis as I watched the CD on the computer screen. CD excerpts of her performance and video performance interact as examples to illustrate arguments expressed in the text. The supervisor was able to advise this talented (profession: performance artist) student to both comply with the university regulations and be able to explore and express her ideas creatively through a creative product engaged in dialogue with the thesis, in a dialogue with the theories. There is argument in a conventional manner and a real, original, creative outlet for her expression of her ideas. The whole entity felt as though it should have been worth more than one PhD. The examiner team needed to comprise performance artist theorists and academics. I was there because of the feminist nature of the work and also my own experience of working with creative research (video MAs and PhDs). It could be the case that a different team of examiners might question even the shape of the work itself. The supervisor had been involved in ongoing work with the student to explore ways in which the issues of identity, memory, gender and performance might be expressed through digital media, video and self-performance, and alongside these how she might, in a more conventional manner, engage in a dialogue with theorists, produce a standard abstract and a standard-looking thesis, and how the two could genuinely interlock, which they did. The performances on CD were the evidence of the theories in action, and part of the arguments and dialogues within the analytical piece. The CD was also a primary source – in this instance a creative product from the performer herself.

For the student, ensuring that she both engaged with the theories and practices of performing or expressing the self as subject *and* performed this in action was crucial. Indeed, it also would be crucial if the thesis had been based on using participant observation, or the self as a case in, for instance, education or business organisation research. One Australian colleague produced a cabaret as part of the thesis. He performed his research output (and passed).

Another PhD student's thesis contextualised the development, useful-
ness and contribution to the community of community theatres. Part of his
thesis included his own community theatre-originated dramas, contextu-
alised and explained in analytical and theoretical terms in relation to his
arguments.

An MA student used her poetry as part of her research development
and output based on a desire to explore theories and arguments about
abuse and self-growth. She got stuck. The subject matter was too personal
and painful. She felt detached when reading the theorists, but it was
digging up too much excess personal material. She blocked and disap-
peared. She began to write poetry, got in touch, published the poetry and
gained both an outlet for her complex feelings and a renewed sense of
self-worth. 'You have here,' I said, 'the core of your new version of your
dissertation!' We brainstormed a shape enabling her to engage rigorously
with those theorists and arguments that she said *now* helped her to focus
on, contextualise and clarify what she was writing and why. Initially, there
was a theoretical argument and the poems. Towards the end, now, we
have just met again and decided to interleave fully the different kinds of
writing. She is going to produce a separate log, but she will also:

1   introduce the dissertation with a poem;
2   introduce the self and creative expression as subject;
3   move into the theoretical perspectives and set them up;
4   write analytically and critically alongside the personal, following each
    poem as evidence and exploration with a brief analytical discussion of
    how it works theoretically, why, and how this engages with arguments
    informed by theorists.

We have talked through instances and suggested using stuck-over addi-
tional critical pieces interleaved as notes, then rewriting and incorporat-
ing them. The poems are in a different colour from the rest of the text. We
have a piece developing here which she owns, and which, in its interlock-
ing shapes, can enable creative expression, reflection on that expression,
creative discussion of how it engages with arguments underpinned by
theories and the work of appropriate theorists.

The role of the supervisor in these cases expands from that of supervi-
sion of more conventional research (not necessarily less innovative but in
disciplines which require less innovative forms of expression). There is a
need to work alongside students to help them release their creative ener-
gies and develop creative engagement with ways of expressing the ques-
tion they are asking, the issues, the theorists, and the arguments they are

making. Some of this is done through brainstorming, trial, experiments, reflection and ongoing evaluation of the success of the developing creative expression in conveying the argument. We are all concerned with expression – but creative artists have two interlocked versions of expression, at least, to deal with.

Students in art and design and other creative disciplines should find a second communicative language other than their artwork to engage analytically, critically and in a dialogue with ideas and expressions in the field, with theorists and practitioners, as well as conveying ideas in creative forms, or they might *not* communicate to others. Researchers clarify methods or they might not otherwise be able to bridge gaps between the internalised, personal, creative purpose and its expression – often clear to the producer – for the audience, in this case, supervisor, examiners and, hopefully, other researchers and readers in their field (and other fields). It is an ongoing issue in art and design education, performance, creative writing, practical-oriented architecture and other design or practice-related work. Nakamura and Csikszentmihalyi (2001) see creativity as knowledge production, as a socially contextualised and constructed experience, and Bakhtin (1981) defines it as a dialogue. The creative researcher and those researching in creative subjects are developing a mix of the individualist and the socially situated, the developing and unbounded, and the articulated work in a dialogue with others, with previous work and with the structures of the form of a dissertation or thesis (plus whatever products and processes can be also expressed) and so creating a new form of expression, communicated to others. Nurturing creativity is also supported by recognition of the fact that 'it is a very personal act' (Jackson, 2002, p. 1). It is connected to students' identity and motivation for learning.

> So that they ... develop self-efficacy, encourage risk taking in safe environments and help students engage in messy/complex processes in unpredictable situations which have no right or wrong answer. (Jackson, 2002, p. 3)

Supervisors need to work with their students to find the appropriate creative output, and to help them articulate both what it communicates and how it engages with the theories underpinning it. Figure 16.1 explores the tripartite process of the creative research product, indicating how the parts interlink, and what the supervisor stimulates with regard to reflection (log), *creativity* and analysis.
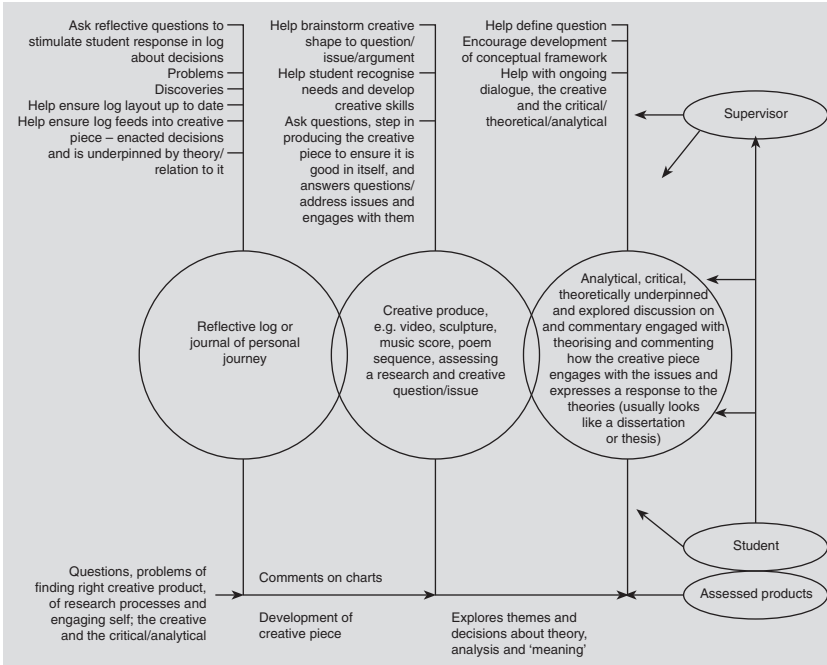
FIGURE 16.1   SUPERVISING CREATIVE WORK

Task

If you have students with a creative idea, proficiency in a creative process, or who would like to explore and express themselves creatively, consider how you can:

- stimulate and encourage them to brainstorm a creative response
- help them produce a creative product itself for the research
- engage them with appropriate theorists to underpin, inform and help analyse the importance of their creative response
- set up a commitment to producing a log of ideas and discussions
- check and support (1) the creative product; (2) the analytical and theoretical response; and (3) the reflective log
- advise your artistic and creative student who argues it is impossible to be analytical because the creative piece speaks for itself … (it doesn't)

▶ **Supervising creative work that has already been produced**

Increasing numbers of students in professional or creative practice are seeking the opportunity to produce dissertations and theses, and some are seeking supervision enabling them to incorporate analysis and find a theoretically argued base for their own creative production, not necessarily produced specifically for the award, but as part of their own practice. This was partly the case with the performance artist, above. In this respect, supervision resembles that of supervising the PhD through publication, which I will discuss next. It involves working with students to select work that develops and expresses their argument, and supporting them in their research for the theoretical underpinning – the critical and analytical base to their work that they then need to express as a way of understanding their work. The whole must be coherent and address central concerns and questions, as would a creative piece of research and its output.

▶ **Supervising the PhD by publication**

In many universities worldwide and particularly in the sciences, students are now encouraged to publish as part of the PhD process, so that in Malaysia and Sweden, up to four publishable or published pieces are seen as part of the PhD itself. Undergraduates and master's students are rarely expected to publish in advance of their assessment, although, increasingly, internal and particularly online publications are offering the opportunity to identify elements of the work, shape it for publication, and so cut back, structure, hone and practise in small scale the production of a peer reviewed and acceptable contribution to knowledge. The journey of the PhD is one of contrasts. Historically, often, would-be students who had produced publications were advised that they needed to embark on a new piece of work in its entirety for the PhD. For many, this was fine – a chance to do something related to previous work perhaps, but a completely new, coherent enterprise. For others, it represented an enormous hurdle – returning them to the beginning of their career. Now many UK and Australian universities are recognising and supervising the PhD by publication. In the most popular version, the candidate identifies a theme and question, issue, area or coherent focus underlying some of their work and selects elements of the work accordingly. This is similar to identifying a research question. They choose the published works – for instance, a book, four chapters, three other journal essays, and resources. These are part of the thesis; the other part of the thesis being a

'wrap' of normally about 10,000 words. This wrap resembles the introduction and theoretical perspectives chapter of a more conventional thesis insofar as it draws together the theorised argument underpinning the exploration and expression in the published pieces. It involves elements of the published pieces in a dialogue with underpinning theorists, quoting, but not extensively, from the pieces themselves to do so. To enable a coherent route to be seen through the rest of the thesis, there is a discussion of the published piece, showing how arguments have developed over time, and how evidence-based pieces relate to theorised pieces, and books to essays, in a developmental, complex sense, commenting on reasons behind the work, impact and so on.

In this way, the published work is brought together for the student as a personal, reflective and analytical journey. For many, this is a marvellous opportunity to track where, why and to what effect, and what links appear in the variety of publications they have produced, to date, throughout their career. For some others, it provides an opportunity at the outset of the PhD to identify existing work, and to research towards the production of further appropriate work that will complete the coherent case for a PhD, that is, it acts as a route map with some of the route yet to be sketched in, planned and completed.

One colleague reflected on and selected his research educational development work, drawing out themes involving the profession of educational development, with assessment as a special focus. Another recognised two items – the political and the gendered – in her published work on Spanish cinema and varied these with a theorised 'wrap'.

Supervisors have many standard supervisory tasks to perform in relation to students seeking a PhD by publication, with a few exceptions, such as that students are often advanced, even eminent, in their careers. It is important to establish a working relationship that begins with collegiality. Additionally, the supervisor is the link between the student, the PhD and university mechanisms. Power and authority relationships still operate that need to be respected in any learning contract and agenda, any response, or completion of agreed activities over time. The supervisor will probably, initially:

- Identify with the student the theories, issues, questions and themes that will form the backbone of the PhD by publication; identify the basics of a conceptual framework seen to inform the published pieces – the key themes, theorists, concepts and arguments running throughout the range of work.
- Identify which gaps in knowledge the work fills as a whole, and that particular pieces of it address or fill, encouraging the student to make a case for this early on in the 'wrap'.

- Identify their boundaries – this is certainly a difficult issue if there has been a great deal of disparate publication. For example, one student might have written poetry, essays about the teaching of literature, and essays about crime fiction, contemporary poets, and nineteenth-century novelists, but must select a coherent route through this.
- Identify what this PhD is going to be about.
  - One area might be 'contemporary poetry'. The student's own publication can be a case in point – so this would be a semi-creative PhD including publications (like those discussed above).
  - Another might be to suggest or think of taking a line of argument through the contemporary pieces, novels and poems, or a line of argument that is more historical and combines the nineteenth- and twentieth-century pieces and a rationale for that combination. Whatever the choice of underpinning argument and shape to the selection, there has to be a very clear rationale because this is the *main element* of the argument for the PhD itself – coherence. The PhD also has to have internal coherence and conform to the various descriptions produced by Winter et al. (2000) or others like them (see Chapter 5) to pass.

Brainstorming a variety of possible routes through the existing work, then identifying any further work that might need to be carried out, is essential at this early stage. Identifying what needs to be left out and why, what put in and why, what developed and why, and what theorists, theoretical and conceptual framework will underpin the whole is important. Equally important is the working relationship based on a learning contract – formal or informal – with clarity over who commits to what. Regularity of supervisions and realistic timeframes are important, as time is short.

As the work begins to come together, the supervisor will probably be involved in a series of supervisions focusing on the 'wrap' as if it were a dissertation in itself, for here lie the concepts, theorists and theories, as well as the coherent argument uniting the whole. This needs to be extremely clear and succinct, making reference to the publications in a dialogue throughout.

There will probably be moments when some favourite pieces of writing must be jettisoned because they just don't fit the emerging rationale and theoretical perspectives of the 'wrap', and where various holes are identified that need filling. It is preferable not to have too many new items, otherwise why not do a PhD from scratch rather than one by publication?

When the PhD by publication is complete, the student will have a viva like any other student. It is crucial here to ensure the internal and external exam-

iners can understand the nature of a PhD by publication as having coherence along various themes and arguments, but not in itself being a completely coherent whole from the outset and throughout. Not absolutely everything that is written and already published as essays and books will in themselves contribute to the core themes – there will seem to be some extra tangents and excess elements, even in very coherent PhDs by publication, because the pieces were written separately, earlier, for other purposes, and the published pieces as a whole are not chopped up to re-select only completely coherent elements. Instead, what the examiner (informed by the university) and the supervisors are looking for is a coherent *backbone* or 'wrap', with the published elements fitting this – and some other parts of those publications not fitting this.

One case for a doctorate is already answered and achieved by this form of PhD by publication, since all the work has in fact been published. It might well be reflecting different tones – some highly theoretical, some very specific and practice-oriented, and in some cases some in a different language (one colleague presented some of her work on developments in Spanish film in Spanish from Spanish journals).

The supervisor's work throughout is to help the student with maintaining momentum and being able to see coherence in the choice of pieces to include or develop, making a case for these in the 'wrap', the introductory piece, and any final conclusion. At the end, the supervisor works with the student to review the coherence of the whole, ensuring theorists are mentioned; elements in the thesis are introduced in the wrap; ideas mentioned in the wrap appear somewhere else in the pieces comprising the thesis; and any introductory comments at the start and finish of different pieces are made to ensure that readers can see how they link together, one to the other.

Finally, the supervisor can work with the student in a mock viva where the student is ensuring he or she can:

- defend the contribution to knowledge made by elements of the work and by the work as a whole;
- argue for cohesion of the chosen pieces;
- explain differences in kind and audience;
- explore clearly the theoretical perspective underpinning various theories, themes and concepts throughout the different texts comprising the thesis;
- make a case for a coherent contribution, emphasising development, and seeing variation as a plus.

Activity

What would you do?

1   A senior colleague retires and comes to you to supervise her PhD by publication. She has a series of internal reports and some publications in rather local documents or articles. A PhD, she says, will help her consolidate her career.
2   An eminent local writer decides to do a PhD by publication. The work contains: short magazine articles; creative pieces; a book on a related area; several jottings and ideas.
3   Your student has completed a PhD by publication. The examiner takes one look at it and says 'but this is a rag bag of disparate pieces and an essay about their links, not a PhD'.

▶ Conclusion

For students undertaking creative-based research activities and products and PhDs by publication, there is the same supervisory duty of care during research, through the production of the thesis or dissertation, and before the viva (if appropriate) in conducting a supportive mock viva. After the viva, there is also an important duty in supporting the student through any clarification and revisions necessary to achieve the award, in response to examiner expectations and university rules. I will give Curtis, the creative PhD student whose words have accompanied us, the last word:

> The system could never suit
> My dressing up box of creative pursuit –
> A hunger to learn the long way round,
> (Curtis Tappenden, 2011)

▶ Further reading

Bakhtin, M. (1981) *The Dialogic Imagination,* trans. C. Emerson and M. Holquist (Austin and London: University of Texas Press) (original work published 1975).

Elbow, P. (2006) 'The Music of Form: Rethinking Organization in Writing', *College Composition and Communication*, 57(4), 620–667.

Kelly, F. J. (2011) 'Cooking Together Disparate Things: The Role of Metaphor in Thesis Writing', *Innovations in Education and Teaching International*, 48(4), 429–38.

Nakamura, J. and Csikszentmihalyi, M. (2001) 'Catalytic Creativity: The Case of Linus Pauling', *American Psychologist*, 56(4), 337–41.

Wisker, G. and Robinson, G. (2009) 'Encouraging Postgraduate Students of Literature and Art to Cross Conceptual Thresholds, *Innovations in Education and Teaching International*, 46(3) (August 2009), 317–30.

17 Maintaining momentum: linking quality and wellbeing – through transfer, progress reports, changing supervisors, and any difficulties

You know it's hard, it's quite sad in some ways that you look at a lot of students these days who are you know turned off learning but I suppose at the same time, for anybody else who can dedicate their time, and it does take time, give it a try, purely for the mental exercise of going through a journey, because it is a journey and it will turn you upside down and it does screw you up sometimes but at the end of the day if you've come up with one new thing that you've learnt from it then that's surely a better thing. But I'd encourage anybody, doesn't matter where just go for it. (ESCalate respondent, 2011)

This chapter considers:

- *linking the personal and the intellectual*
- *significant development moments – transfer/confirmation of candidature, work-in-progress seminars, progress reports*
- *maintaining momentum – supporting your students in their continuing research through to writing up*
- *dealing with potential difficulties*
- *involving personal, learning and institutional processes to maintain momentum*
- *emotional resilience and doctoral 'orphans'*

Research is exciting, demanding and rewarding but can also be a lonely and lengthy business compared, by one of our PhD students, to long-distance running. We have considered how students can make the most of research degree development programmes and peer group support, as well as their supervisor (Chapter 10), and we have looked at some of the interpersonal and research difficulties you and your student might face working together (Chapter 11).

The stages of the EdD, PrD and many master's degrees are constructed partly with the maintenance of momentum in mind. Maintaining a staged process requiring the production of work and response to feedback on a regular basis helps minimise the chance of disappearance, lengthy periods of ill-defined work at a level of unnecessary or misdirected detail, and repetition. It also prevents lingering on with unsolvable problems, or working at an accumulative level, summarising detail instead of problematising, analysing, conceptualising and writing critically in the students' own voice, *using* what they've read and discussed, in a dialogue with the academic community.

▶ Progress, transfer, confirmation of candidature, upgrading reports

Institutional practices and processes can support the development and momentum of students' research and writing because they can underpin regular deadlines, and the opportunity to focus on work in progress. They enable us as supervisors to work in a partnership with our students, and the university to not merely monitor progress but support it. MA students are encouraged to deliver oral reports on their progress to peers. MPhil or PhD students will probably be expected to provide a report on progress, confirmation of candidature or a transfer document, usually after one year's study, and in many universities, every year thereafter. Students on EdD or PrDs provide a series of progress reports, each building upon the other, leading to transfer to the second stage of the EdD/PrD – the writing of the final thesis. The UK Open University asks students to undertake an MA 'Educational research in action' module, enabling entry into the first stage of the EdD. They then build their progress reports up on each other, having had their proposal accepted as the end result of the master's module, but the work is not merely cumulative; it needs to increase in complexity if students are to move through year 1, stage 1 and stage 2 of an EdD. Others might complete an MRes or MA with a research development element to start their developmental process through the PhD.

In the North American model, students complete coursework which also helps them stage their work, followed by an oral and a dissertation, which is shorter than the UK or Australasian versions. The models are different across the world, with some countries adopting the UK and Australasian, some the US model. At some European universities, in Sweden for example, PhD students complete four journal essays as part of their development, with the final product being a theorised, well argued 'wrap' round the whole. In Europe, the Bologna process (http://ec.europa.eu/education/higher-education/doc1290_en.htm) attempts to capture the differences in PhD, master's and undergraduate levels and map them to ensure equality and possible transfer. The various stages or steps in the process of the PhD, EdD, PrDoc are there to help support progress and to identify lack of it in order to put support in place.

For PhD students who need confirmation of candidature or those regis-tered on an MPhil wishing to transfer to PhD, progress approval, transfer or confirmation of candidature documents crucially act as documentary evidence that they have been carrying out doctoral-level research.

Progress or confirmation documents all variously report on progress to date, noting how far the student has worked towards and achieved underly-ing aims, conducted research, answered the questions, and met and dealt with problems. Some students need to produce an oral report, or a progress/transfer document, backed up by discussion with a supervisor or a peer session. Students will need to make full notes of the feedback given about developing work further (and possibly resubmitting if the appropriate committee or body decides they are not yet ready to proceed). Check with your university regulations as to what should be reported and explored, evidenced and planned in a transfer document, progress report, confirmation of candidature or upgrade document and find out about the process: how, where, when to submit; whether your student will need to present work orally; and the regulations about any resubmission if necessary.

The aim of transfer reports is to ensure students are on course to complete and write up a successful piece of research. It is an excellent opportunity for taking stock of work to date and for the future. The researcher can sum up the work to date, shape it, indicating what plans he or she has to complete the research and write up the thesis or dissertation. The student reflects on notes taken, supervisions, difficulties met, suspected achievements and decisions for the future.

When you are convinced that your student is working at PhD level, an application to transfer can be submitted to the appropriate research degrees committee. The arrangements for the transfer of a candidate's registration from MPhil to PhD will appear in the university's research degrees rules and

regulations. If students do not have to write a transfer document, they will certainly have to produce progress reports. Below is a typical progress report outline for a PhD, although lengths differ in different universities.

Progress report for a transfer to PhD – an example
With their supervisor's guidance, students should produce a progress report (of 3,000–6,000 words in length), consisting of:

- a critical review of the research so far *and*
- a statement of intended further work for the PhD, including details of the original contribution to knowledge. Once the progress report, *plus an abstract of not more than 500 words*, are agreed by the supervisory team:
- the supervisory team must sign the form (giving reasons why you are ready to transfer to PhD); the *abstract* of the progress report must be included as part of the application.
- Details (name, address and telephone number) of an independent academic who is willing to complete a specialist report on the application must be provided with the application, which must be submitted *at least five weeks* before the appropriate committee meeting. The secretary of the research committee will send the external referee a copy of the application form, including the main progress report.

In several universities, including the London School of Hygiene and Tropical Medicine (LSHTM), students undertake an *upgrading* activity that acts as a transfer, or confirmation of candidature. Their work is then registered as a PhD. They both prepare documentation for this *and* present at an upgrading seminar in front of their peers. At the University of the West Indies also, this upgrading transfer moment is a public one, attended by peers as well as university staff, providing an opportunity to present work-in-progress for review and feedback, *and* to practise the defence skills necessary for the viva.

LSHTM also have a DrPH (Doctorate in Public Health) which, like the MPhil, includes a shorter thesis and an accordingly short literature review, study outline and further information about development plans required at this confirmation/upgrading stage.

> The standard format for upgrading assessment for MPhil/PhD should include preparation of:
>
> - an abstract of not more than 300 words
> - a brief literature review on the background to the research work being presented for upgrading (2,500-word maximum)

- a report (or protocol) of all or a section (to be agreed with the supervisor) of the research work already undertaken (or to be undertaken), to be written in a format appropriate to disciplines in the Faculty in which the student is registered (2,500-word maximum in laboratory-based departments and *5,000-word maximum* in non-laboratory-based departments); documents that are larger will not be accepted
- a two-page outline and timetable of the research proposed to complete the PhD programme
- a complete reference list for the report
- a confirmation that funding is available for field work, if field work is appropriate
- if registered part-time, confirmation from the employer that at least two days per week will be permitted for time to be spent on work for the research degree
- whether this research is feasible, and will make a contribution to knowledge
- whether the student has shown an ability to undertake the research, analyse it and write it up.

The Committee will also want to know whether the student has strong expectations of funds being available to enable the fieldwork to be undertaken and to see a timeline of expected progress (London School of Hygiene and Tropical Medicine, 2011, pp. 30, 32).

At several universities, the upgrading or review committee reviewing the work for upgrade/comformation/progress/transfer includes external as well as internal personnel and involves a presentation. Committee members normally confer for a short time after the seminar or presentation, then ask the students to comment on the presentation and then to hear the report. This is a valuable opportunity to get quality, objective feedback on the research and its progress, importance and viability. Some universities provide for an alternative way of indicating the scope and success of work to date, through submission of actual completed work, including chapters of the PhD thesis, with accompanying discussions. There are several models, and another involves handing in chapters with an accompanying plan:

As an exception, you may submit a minimum of two completed chapters of your proposed thesis in lieu of a progress report. One chapter should deal with theoretical foundations upon which the research is based; the other may be a chapter on either the methodology or the fieldwork.   (adapted from Anglia Ruskin University documentation)

▶ **Transfer criteria**

The moment of transfer is also one at which to consider the expected quali-
ties of a final thesis which is likely to pass. We will look at these criteria in
more depth in Chapter 00 when considering final submission for the exami-
nation, but at this transfer stage students would find it useful to revisit their
awareness of what they are working towards. Supervisors and students need
to discuss criteria used in the discipline to determine whether research is of
a doctoral standard. Some evidence of the following is normally required:

• an appropriate doctoral research topic of sufficient scope
• satisfactory knowledge of the background literature and ability to relate
  the project to existing scholarship and research in the field
• having started to work at a PhD level, especially in terms of theoretical
  insights and conceptual frameworks
• having planned a suitable research programme to achieve successful
  doctoral conclusion
• originality and/or creativity
• the exercise of independent critical powers
• a significant contribution to the subject knowledge in the research field
• training in research techniques and methodology.

In preparing an upgrading/confirmation/transfer document, report or activ-
ity, students could be asked to work towards the outcomes through the
following activity.

Task – audit

Suggest that your students consider the following:

• Looking back over the original proposal, how far have you achieved
  the overall aims and outcomes so far?
• What has been your research progress – what have you done in rela-
  tion to the plans, design and timeline?
• What theories and theorists have you discovered to underpin your
  work and help you ask your research questions?
• What have you discovered so far from the literature in the subject
  feeding into, underpinning and in a dialogue with your ideas and
  work?
• What theories are emerging from this that relate to your work?

- • Summarise your literature review chapter and particularly indicate how this has fed into your research planning and activities and has helped you to contextualise your results to date.
- • What methods have you used and why?
- • What elements of the research activities, such as fieldwork, lab and bench work, and data collection have you carried out?
- • How appropriate and successful (or otherwise) have they been in helping you to:
- • (a)   ask your research question
- • (b)   gather information and data
- • What have been your findings so far?
- • Have you conducted a pilot and, if so, how did the results from the pilot feed into reshaping or reconceptualising your main research?
- • What avenues of thought and focus have you taken because of what you have found to date?
- • Can you now provide a justification for the award? Look at the definitions of what constitutes a BA dissertation, master's, MPhil, PhD, EdD, etc. – how does your work fit the definitions to date?
- • What areas of further work are needed for your research to fit these definitions?

▶ **Planning and time**

Students need to progress from their early pilot studies, if any, to ensure their work does look as though it will be at a significant *level*, that is, it will be answering significantly important questions, fill in gaps in knowledge, and be sufficiently complex for the level of the award. They can discuss all of this with you, based on the audit undertaken with the questions and the production of a transfer, upgrading, confirmation or progress report document. They will need to re-plan their timeline for the rest of the research at this stage.

You could ask your student to provide a detailed plan for the next year/to completion. Discuss the stages of this plan in detail looking at:

- • what you hope to find out about now/continue finding out about;
- • what you intend to do with your data and findings to analyse and draw conclusions;
- • the methods you will use – will you adapt or change them? Why? Why not?
- • whether there is any need for further extended study or any curtailing of the study;

- whether there is any need to refocus because of any problems, contra-
dictions, new lines of discovery or surprises.

Students should be asked to produce a time-plan (in the form of a critical
path analysis) to help them to replan realistically and indicate their work
plans to completion (see figure 17.1). They should:

- Consider key dates.
- Plan key activities, such as collecting data, analysing, writing up and
giving presentations.
- Think also, as they replan, about what else is happening in their lives –
what family, friends and work demands could affect their research, and
which periods of time might be less useful for undisturbed work;
- Consider some things for which we can't plan – unforeseen activities.
Allow some spare time just in case something goes wrong. Be realistic.

They will probably be expected to submit time and progress plans along with
any full transfer document or progress report, but if not, they should just
keep them as a personal guide.

FIGURE 17.1   Timeline for a presentation of work in progress –
replanned: an example

▶ **Strategies for keeping motivated**

Other colleagues have also written about strategies for maintaining momentum so that the research and writing up keep moving along, and so does life. The following is adapted from Stevens and Asmar (1999).

- Revisit a paper that originally inspired you.
- Read an eloquent account and enjoy the flow of ideas, the ease and elegance of it. Don't be daunted by this – see it as a challenge.
- Realise that your own research and writing is improving all the time: you are enrolled in a training degree and it is alright to be learning.
- Write an abstract for a conference that is being held in an appealing loca- tion – use the conference as a deadline for some work you need to complete and use the trip as an incentive.
- Realise that working through the tough times will make you a more sympa- thetic and effective supervisor or team member later.
- Watch others you admire: notice their ways of working, interacting and their generosity of spirit and ideas. Find your own strengths, know what you are good at and push those skills to their limit. Be aware, too, of your weaker aspects and work on them when you can.
- Be aware you are the expert in your field – no one else knows as much about your research questions as you do. Be confident in this knowledge and use it to bolster your self-esteem when you need it.
- Meet with people who make you feel good about yourself and what you're doing. Avoid people who make you feel bad about yourself.
- Plan a positive event or reward for yourself at the end of a tough section – even if it is only going to the movies, or sharing a bottle of cheap wine with a friend.
- Organise or join work-in-progress meetings with peers and ask them to act as critical friends to your presentation of your conceptual framework and work so far.
- Enrol a critical friend who is willing to read your nearly finished draft and make trustworthy, helpful but critical comments about the style, argument and business of the research.
- Develop a routine that carries on alongside the research and has its own different ups and downs – this could be social, intellectual, physical.
- Draw up a list of things you like to do when you finish and set a few plans in motion, but don't spend all your time on this!

These strategies all help to refresh reading and research, to help refocus on the topic, revive self-esteem, return the students to sharing with supportive

colleagues, and let them see that *their* work *is* progressing but that life goes on too!

Supporting students in research, writing and completing – some strategies and some criteria

Research is a long process. Some students can become bored, estranged, demotivated and isolated. Communities, peer groups, online communication, institutional monitoring and provision of locations, facilities, and regular opportunities to support and share developments all help students to help themselves build sustainable research communities. Successful postgraduate students are our future colleagues and project managers, and need international networking, communications and opportunities to share and guide developments and communities over time and distance. These communities can remove many of the everyday demands students might have of supervisors, since some of the support and clarification, as well as the trialling and reading by critical friends, can be carried out by such communities. By helping the student, we help them to be more independent.

To help students keep motivated and maintain momentum, you can set up peer group activities and support students with: space; mentoring; technology; supplying facilities; encouraging online discussion forums; work-in-progress seminars; mini-conferences; continuing to put students in touch with each other; maintaining regular supervisions, whether face-to-face or by email or phone; following up on regular scheduled meetings; and feedback and response deadlines. Some of these strategies rely mainly on the students, others on the supervisor and/or the university.

Structured supportive programmes, personal, learning, developmental, institutional strategies and practices all help maintain momentum through to completion.

Activity

Consider:

- What effective strategies do you use with research students to help them to maintain momentum?
- What do you do or could you do to support doctoral students as they prepare for transfer/upgrade to PhD/confirmation of candidature?
- What might go wrong and why?
- How could you help students deal with problems?

▶ **Feedback, staged work and confidence**

Part of what keeps students going is supervision feedback on their work, and opportunities to 'take stock', i.e. identify achievement and further development needed. In Chapters 9 and 00, we consider a range of supervisory responses building up critically, conceptually sophisticated and articulate engagement and expression, the kind of writing that reflects the research we hope students will produce, especially at postgraduate level. However, not all our comments can be quite as direct and honest as we might like, if we want students to keep going at different points in their work. This is particularly true when they are experiencing various degrees of 'stuckness'. Delamont, Atkinson and Parry (1997, p. 29) suggest that to build students' confidence, it is important occasionally to word feedback in a generalised or positive tone, and in Chapter 8 I suggest the 'feedback sandwich' of positive comments, constructively critical and focused comments, then positive final reflections and ways forward. Feedback is a form of communication and some students might take comments absolutely at face value, or believe only the positive comments and ignore the critical and developmental, or misinterpret what is needed and sometimes do more – sometimes wasted, sometimes inappropriate – work through misinterpreting our feedback. Interpretation of feedback could also be affected by prior learning and cultural learning background. *Explaining* the intentions of different kinds of feedback (Murray, 2002) is important here.

Staged progress reports are important moments for feedback and moving forwards. Many institutions require transfer documents/confirmation of candidature and guidance reports/progress reports either written, or written and orally defended, to help students, supervisor and university identify progress. These are to ensure, with the supervisor, that:

• good progress has been made on the research;
• the scope and range of the work has been appropriately shaped;
• the work carried out to date is organised;
• the work is liable to be of an appropriate level eventually;
• it has achieved some of the planned stages;
• it is sufficiently conceptualised;
• it can be analysed, critiqued, summed up and the next research and writing steps planned;
• if refocusing, extending or cutting back, reshaping, or further developing the topic or methods are necessary, that the reasons for this are understood and explained in progress reports, research work-in-progress seminars, or in the student's log;

- the candidate/research student now
  - focuses on the rest of the research
  - plans ahead to completion, writing up, presentation and
  - defence in the viva (if a PhD).

It might be useful to work with your students to audit their work against the range of characteristics of a good PhD developed by Richard Winter et al. (2000). Whatever the level of their award, they should be achieving these outcomes to some extent, appropriately, at the award level, be able to audit their own work to date, and, with your help, evaluate it and re-plan. Ask them to say what the characteristics mean for them in their work, what further clarification and further work is needed, and where to achieve them. These are the qualities expected in a final thesis or dissertation.

- originality
- organisation
- engagement with theories
- dialogue with the academic community
- publishability
- readable expression
- coherence of the text
- conceptual as well as factual findings.

Activity

This is another audit to conduct with your students, which relates directly to the specific development of the research and the thesis. Have they:

- chosen an appropriate research topic of sufficient scope for the level of their award?
- gained satisfactory knowledge of background literature and work?
- chosen an appropriate research methodology and methods?
- produced original contributions to, or filled a gap in, knowledge?
- written eloquently at the right level, presenting well-expressed and backed up arguments throughout the work to date?
- discussed data/findings/analyses?
- met any surprises/blocks/problems? (There should have been some!)
- developed a defence of a decision when meeting a surprise or a block?
- noted this in their research journal? Was it part of a supervision discussion?

- had to re-focus/cut/extend?
- changed their research methods or methodology? Why? Or why not?
- developed a defence of their choice to change or not?
- found new routes of thought?
- provided a potential doctorate/master's/undergraduate dissertation?
- provided a justification for the award?
- developed sufficient skills in the meta-language of research study to be able to describe, explain and defend what they have done and are doing?

As your students move on with their work, they need to think in a focused way about the qualities of a good thesis or dissertation; evaluate their work so far; pull their work together and see where it has been going; note what has or has not been achieved; note what has been or has not been successful; and identify what needs dropping, extending or refocusing.

Presentation issues

The dissertation or thesis must be students' own work and must:

- be presented in a satisfactory manner
- be well argued and well structured
- be readable – good grammar, punctuation, spelling and expression
- tell the story
- make explicit the architecture of the dissertation or thesis and links between ideas, methods and chapters
- display logic of argument
- use appropriate language.

Quality and contribution

It needs to make a significant contribution to knowledge. You could work with students to evaluate examples of other work, then look at their own to audit it.

Organisation

A good thesis requires the following elements, usually in this order, although there are some disciplinary differences:

- Abstract.
- Preface and acknowledgements.
- Introduction, chapter 1, setting context, aims, research questions, and introducing the conceptual framework (framework of ideas and theories which inform the research and the written thesis throughout).

- Theoretical perspectives, chapter 2, engagement with literature from theorists, critics, experts, in a dialogue with their own work.
- Methodology and methods, chapter 3, explaining, theorising and defending choices and the design of the study. In scientific dissertations and theses this can be quite short if the method has been determined by the project, while in social sciences it is a long defence with underpinning theorists, and in some humanities and arts, particularly literature, this chapter is unlikely to be present.
- Chapters 4, 5 and 6 of a social science thesis focus on data, probably discussing it in terms of the emerging themes, offering analysis and *discussion* of implications and meaning of data, presenting findings, and continuing the argument. A science thesis or dissertation is more likely to present the data with some introduction in the fourth and fifth chapters, then discuss and interpret in the sixth chapter, while a humanities thesis will most probably either follow the social science model or more likely take a theme (or period or author) for each chapter and discuss these using the data as evidence to back up arguments.
- Conclusion – conceptual and factual.
- Bibliography.
- References.
- Appendices, including fuller statistical tables, diagrams, illustrations, the methodological tools used (if appropriate), e.g. survey, a participant consent form.

In the middle of their research and writing up, it is important for students to look ahead, re-plan, and consider what they need to do in order to finalise their research and writing in these various chapters.

▶ **Writing up and writing well**

Wherever students turn for advice, they will hear that they need to start writing early, and to draft, re-draft, edit and edit until their writing says what they need it to say. Chapters 9 and 18 also consider good writing.

Not everyone is equally gifted at writing, even in their first language. Students can benefit from attending writing workshops run by research development teams, postgraduate students' associations, writing groups, or working one to one with a writing coach/mentor/tutor. If your students' skills at academic writing are generally weak or they lack confidence, advise them to enrol in a course – earlier rather than later. It is hard to ask those who may already be balancing a job, family and research to fit this in, but

they are essential skills, useful long after the research has been written up and the qualification gained. Advise your student to write something every day and to consult style guides that help with layout and presentation (see also Chapter 9). Some universities offer an English language checking, support or editing service, which is particularly useful if English is not your student's first language. If there is no formal support service, they might find it useful to ask about who is known to provide such a service (for a fee). It is important in the use of such services that the support, or editor, enables the student's voice to be heard rather than writing it for them (they can also make some interesting translation and interpretation mistakes, so it will need a further read through by you and your student).

Developing the shape and expression of the dissertation or thesis
For students beginning to hone or improve their writing, advise that they read Chapters 9 and 18 and critique *several* dissertations or theses and *several* journal articles in their field, considering the:

- abstract
- introduction
- engagement with the literature in a dialogue
- clarity and appropriateness of methodology and methods – also defended by the literature, and appropriateness of research design
- quality and clarity of the expression throughout
- different kinds of writing in different chapters – some informative, descriptive, narrative, some argument, theorising and conceptual, and to note the cohesive signposting of themes, ideas and stages in the development of the work
- use of close reading to identify words which link evidence and argument, theorising and the writer's own arguments, organisation of arguments
- layout and presentation
- conclusions
- bibliography, which includes both foundational and up-to-date texts
- layout of appendices.

Many writers and researchers produce their introduction *last*, but there is no harm in drafting parts of it early. Mine took six months to write. My dissertation student was shocked it was taking so long. Each time she visited, it seemed to have hardly moved on. In fact, I was honing it to ensure it:

- established a research question;
- gave a sense of the current and established work in the field into which my own work was entering as part of an ongoing dialogue;

- indicated that future chapters would expand on and clarify the theories and concepts, the theorists and the literature I was using as backbone and springboard to my own work;
- indicated (effortlessly!!) how the argument was established and would be seen to proceed in the following chapters;
- was *really* well expressed (examiners give the introduction a *very* serious reading);
- was well laid out and presented.

I learned a lot about myself as a writer through this process of rewriting the introduction. I learned that I write fast and inaccurately, then work obsessionally to try and get the expression and presentation right. Ask your students what they are learning about themselves as a writer and check with them how they are developing their:

- introduction
- theoretical perspectives/literature review chapter
- methodology and methods chapter
- thematic chapters/results and discussion chapters
- conclusions, both factual and conceptual.

Have they decided:

- who to dedicate it to?
- who to acknowledge?
- what to put in the appendices?
- whether to use footnotes or not?
- any illustrations? tables?, etc., etc.

`Final drafts

As students begin to produce second drafts of some, and third drafts of other chapters, they will need some help with the quality both of expression and of presentation, and the quality of the argument. However, supervisors must not do the work for them, although colleagues are divided on how much we correct or edit with regards to typos and expression.

My own practice as a supervisor is to make very detailed, thorough feedback comments and suggestions on a part of each chapter and indicate what kind of comments I am making (style, theorising, engagement with the literature, quality of argument, conceptualisation, critical engagement, new ideas and so on). Then, I take the critical, conceptual comments through the

rest of the text but do not 'correct' typos and expression. In the final stages I am more likely to highlight the areas where expression is less clear and make suggestions for improvement. I try NOT to write for the student. They will need to do this themselves since, after the award, others will expect that the achievement of that award indicates that they CAN write. Ask your students to familiarise themselves with the rules for layout and presentation, and the conventions of a dissertation or thesis in their discipline and their department/school/faculty (see Chapter 18). For some thoughts on guiding writing, see Chapter 9.

Theses and dissertations must be the candidate's own work and presented in a satisfactory manner. This involves students concentrating throughout on grammar, punctuation, spelling, clarity of expression, developing an argument, and appropriate language (subject specialist language, the language of 'doctorateness' or 'master's', i.e. that justifies the originality and level of the award, and language that communicates to the readers).

Students need to think carefully about both the actual 'guts', the research explored in the dissertation or thesis, and their ongoing development, layout, organisation, expression, and the quality of the product.

They need to set out the work according to the conventions of the field of study. There are, for example, different conventions of referencing between literature, science and social science work, which provide layout and referencing guidelines for fields of study, and for that particular university. With your student, look at past theses, considering organisation and layout. This is all good practice for writing journal articles in the future, where attention to differences in shape, layout, expression, referencing and ways of engaging with evidence and data are all different between the disciplines, and different again between journals.

Transfer activities, progress reports and regular supervisions to maintain momentum enable students to take stock and allow you together to focus on any problems which they may need help overcoming. There are several issues to consider concerned with momentum, the project itself, and the writing of the dissertation or thesis.

Activity

Please consider how you would deal with these difficulties with momentum which might occur part way through your student's research and writing:

1   Your student has lost their sample or population.

2   Your student has accumulated large amounts of data and seems
    unable to draw findings from them.
3   Your student has produced several chapters at a purely descriptive,
    rather than a conceptual level.
4   There seems to be little argument running through the work so far.
5   Little has been written/what is written is fragmented, not linked to
    other writing.
6   Midway into the research, the student has not made much progress
    and now wants to change the question or intended outcomes of the
    research.
7   The experiments have simply drawn a blank; the data set has fallen
    over.
8   So many personal and family/work/money crises and pressures have
    left the student unable to complete anything or develop work in a
    coherent fashion.

▶ Linking the personal and the intellectual

Undertaking and maintaining research and writing through to completion is
a demanding, long-term commitment which engages the whole person. The
sense of identity and being in the world, and the ability to critique and create
knowledge are intimately tied up, as we have discovered in our NTFS-funded
doctoral learning journeys research (Wisker et al., 2010), the parallel project
(1997–2011), and the ESCalate-funded project, focusing on education
doctoral students (Morris and Wisker, 2011). Postgraduate study engages
students at a transitional moment in their learning and personal develop-
ment. Transitional and troublesome knowledge – about self as well as learn-
ing – combine in many cases to affect wellbeing, ontological health, a mix of
issues about developing identity, and developing learning abilities.
Achievement of the PhD has been seen to involve not only a contribution to
knowledge, but a leap in terms of self-articulation, self-affirmation and self-
development. The master's is a similar but less advanced leap in achieve-
ment, and seen by some as a professional, practice-oriented higher degree,
where theory informs that practice, especially in the research elements, and
seen by others as apprentice work for further research. Postgraduates
acknowledge that their research achievements have raised their confidence,
awareness of ability to think, talk and make a contribution, and their social
status with friends, family, and professionally. The main issues are with the
developing research, and these affect identity, self-worth, and the learned
life journey. For many research students the choice to undertake research

and, particularly, doctoral-level study is a momentous life decision. Students are aware that it is likely to be a major time commitment, and that this may impact on their personal, family and working lives. While the research for an undergraduate dissertation is a maximum of one year, and a master's, a year to two depending on whether the student is full- or part-time, doctorates can continue for some years, so require sustained motivation and momentum and can be costly and affect work availability, requiring more ongoing financial sacrifice. It may also take up students' emotional resources and, with all these challenges, participants have reported that it is very important to enjoy the topic and to feel highly motivated in order to stay on course.

> ... if you're not happy doing this, if you're not getting the fun out of it, if it becomes a drain on you, your emotions, your feelings, and your family time and everything else then it doesn't do you any favours.   (ESCalate respondent)

Several others commented on friends and family thinking they were 'merely students' and suggesting that they 'get a proper job', which really resonated with the large groups (72 plus) of postgraduates with whom I have recently worked on a research development programme in Trinidad. They all burst out laughing when I read out this quotation. It struck a chord.

Kathryn Owler considers the issues involved in current tendencies to view the PhD process as almost mechanical, managed, hardly involving humans at all, where the transitional problems of tackling difficult theory in relation to practice, conceptualisation and expression is somewhat subsumed as a problem for the student, as if it were a personality problem. Under this kind of interpretation of the learning journey, students seem to be expected to get in shape, sort themselves out, get on with it, stop procrastinating and turn the work out, where, for some, the intertwined ontological and epistemological problems and developments require time, growth, and pose very real personal problems, more than challenges. This view of PhDs and PhD students as products is one which also attracts the discourse of a kind of utilitarian self-help ('pull yourself together and get on with it'). While our research has identified stages of emotional resilience, we in no way minimise the stress and difficulties students experience, not least because, certainly on my part, each new piece of research and writing enables me to personally revisit versions of these stresses and difficulties myself. Some of the issues concerning writing blocks are explored in work that Maggi Savin-Baden and I (Wisker and Savin-Baden, 2009) have conducted, referred to in other chapters (00). Owler explores work by Erica McWilliam, Kearns and others:

Rather than being viewed as the result of 'postgraduate pedagogical rela-
tions in a particular sort of academy', the PhD experience was viewed as
what they astringently referred to as 'evidence of "low emotional intelli-
gence"'. McWilliam and Hatcher refer here to theories of 'emotional intel-
ligence' (EQ) popular in the late 1990s and adopted by human resource
practitioners. They argue that, to overcome the difficulties of the doctoral
process, students and supervisors were now being trained to handle their
emotions more appropriately. They point, for instance, to the process
provided by 'human resource managers, staff developers and consulting
psychologists whose job it is to re-inscribe academics and academic
managers as active, enterprising human resources'.   (Owler, 2010, p.
292)

While McWilliam and Hatcher (1999) emphasise that knowledge production
is an activity involving the personal, one of the problems Owler points out is
the emphasis on managing the personal, looking for and prioritising not
rationality but rather 'the right sort of [responsible] irrationality' (1998, p.
212).

   In these terms, if someone does not succeed in the PhD, he or she is
considered 'as emotionally limited, or even immature' (Owler, p. 2010, 293).
Support programmes towards timely completion help, such as that reported
by Kearns et al. (2008) at Flinders University in Australia, but also place the
PhD student at the heart of the problem. Kearns et al. identify what they term
'self-sabotaging behaviours, including over-committing, procrastination and
perfectionism' (2008, p. 77). Supporting the hardy who can survive and finish
is clearly the intention of such programmes, and their work offers small
insight into building hardiness in those who do not naturally possess it, 'so
that the secret and painful life of a PhD student can be brought to an end!'
(2008, p. 87). As Owler notes, however, placing the students at the heart of
the problem and asking them to sort themselves out overlooks their commit-
ment and, we would argue, some of the painful processes involved in main-
taining momentum over a long period of time with a demanding project,
which accompanies other demands, including domestic, work-based,
personal identity and development needs. As Owler notes of student survival
tactics:

In this model the deeply personal component of knowledge production,
particularly if it involves difficult emotions, is reframed merely as a lack of
self-management skills. There is no acknowledgement here that trials and
hardships may have traditionally been required of the doctoral candidate.
Nor is there any recognition that knowledge production is often, if not
always, a passionate process.'   (Owler, 2010, p. 293)

Some of our work has been on the development of emotional resilience, while other research on 'doctoral orphans' (Wisker and Robinson, forthcoming 2012), and anecdotal evidence from postgraduates and supervisors gathered during research development programmes which I run, identifies several problems. These include the passionate trials and tribulations of maintaining the PhD project, and the exacerbation of attendant problems of this long journey by the 'benign neglect' (Gurr, 2001), which is sometimes less than benign, of supervisors who are busy or see a failing or 'slow', unproductive student and are unsure how to help them. There are also institutional processes which sometimes ignore and fail to support students.

Our work on wellbeing and emotional resilience has identified student stress and anxiety, 'stuck' places in their research and writing, and the importance of emotional resilience for successful completion. While our main research message is of investment in personal qualities, leading to autonomy, independence, tenacity and completion, we do not minimise the stress and the 'stuckness' of students' research learning experiences. We argue that supervisors and institutional support mechanisms should minimise the detrimental stresses, while other stress provides adrenaline boosts and opportunity for transformational, troublesome knowledge, leading to conceptual, critical and creative research and writing (Wisker et al., 2010).

Some of our findings from the projects indicate successful strategies for students:

- Confidence in self (not 'shame') (Ingleton, 2000)
- Persistence and tenacity
- Focus

> It means having the single-mindedness, often the bloody-mindedness in the face of all difficulties and they come from all sides, it comes at you from all sides. I mean you still have to live a life while earning no money and still being at school. It means putting up with an awful lot of disrespect from a lot of people because of what you do.   (ESCalate project respondent, 2011)

▶ Tackling problems – changing supervisors, student mobility

> There are no words to explain the way how I feel this morning. The tears are there but I won't let them fall. I have spent TEN YEARS (or at this point

WASTED) ten years of my life on this thesis.   (Wisker and Robinson, forthcoming 2012)

Earlier in this chapter I introduced ways of dealing with issues of emotional resilience and 'stuck 'places in the writing. There could be a number of problems in the middle of the student's work. It might be useful to consider how you could handle these with your student. Some of these are actually to do with changing supervisors. You might need to 'inherit' a student who has begun his or her studies with another supervisor who has subsequently retired, left the university, or realised that the student's work has gone in a direction which is not suited to the supervisor's expertise. You might also at some point need to set up systems to enable one of your own students to change supervision for similar reasons. Our work on doctoral 'orphans' has produced some interesting points about student experiences and supervisory practices.

In our work with postgraduate students we noticed that many of them changed supervisors over time. We were interested to see how students coped with such a fundamental change and what worked for them in the process. Many students acknowledge stress and confusion over supervisor mismatch and neglect, and others felt a sense of loss and betrayal when their supervisor had little time for them, moved to another job, or retired. Reasons for supervisor loss and students becoming 'orphans' (a term coined by one of our respondents in the 2009–2010 research) were many, but broadly fell into the categories of supervisors' role change, mismatch and neglect. The students we interviewed were the successful ones, so our group was skewed, but their survival offers some interesting insights into the transformational learning which encourages ownership of the project, crossing conceptual thresholds by learning and constructing knowledge at a more conceptual, critical and creative level once the stress had died down, and emotional resilience. Their achievement of their doctorate felt very much like a successful personal journey requiring many personal qualities and skills, and tenacity. For those survivors it leads to meta-learning, ownership and resilience. For supervisors, the experience is similarly traumatic. Research we are currently conducting identifies supervisors' anxiety at leaving students behind when they are not allowed to take the supervision with them when they leave jobs or retire. Students and supervisors who have had to change relationships talk of the importance of finding a second supervisor in advance, holding structured meetings with students to enable them to take control of the research process earlier, and staying in touch if they can, to continue the relationship, even in a friendly manner, if not allowed to formally supervise. They also talk of how difficult it is to come to terms with

students deciding that they would like to transfer to another supervisor, because this also seems like a loss at times.

The supervisors we interviewed identify a number of issues they have dealt with and strategies they have used.

If you need to end your supervisory relationship with a student

Reasons and some actions

- You could be seen as the problem, the tyrannical demon withholding support and information, insisting on certain activities, impossible to communicate with, holding the student up, or utterly incomprehensible in your support. This happens and there is no point apportioning blame – you will each feel damaged by the continuation of your supervisory inter- action – so it is best if possible to terminate and transfer, and to end the relationship as amicably as possible so that you can both get on with your work and the rest of your life.
- Mismatch in the project and the direction the student's work is now taking means another supervisor would be more suitable.
  You have had problems working together for a considerable amount of time and feel you have tried to manage expectations and restructure the working relationship, but this has now utterly broken down.
- You are retiring and are unable, or it is inappropriate for you, to continue with the supervision of your student – it would be better for the student to be in the supervisory care of someone with continuing university links.
- You are moving jobs and cannot take your student with you, have many new students to take on in the new job, feel your student is now ready to be more independent and is in safe hands with other supervisory colleagues.

Working together
Some suggestions from our research with student 'orphans' and supervisors who have either taken on these students or lost/handed over students to new supervisors:

- Knowledge, openness and a structure minimise the distress and confu- sion and lead to an amicable solution.
- Find out the regulations about termination of your supervisory relation- ship, transfer, handover.
- Advise the student of the situation in advance and discuss it, seeking his

or her input about ways forward – staying in touch, who to work with from the team, what other support he or she might need.

- Identify another suitable team or committee member, second supervisor, etc. who would be willing and appropriate to take on the supervision. Contact and discuss it informally with this person first. This person might be a more generalised supervisor than a specialist, should the student be well advanced in the work. In this case, the student probably also needs contact with specialists in your own or other universities.
- Broker and support transfers until the student has settled with the new supervisor and then, if you can and feel it is appropriate, stay in touch in a supportive fashion without intruding on the new relationship.
- If your relationship has broken down in an unpleasant fashion, try to find out why, and see what you can learn about minimising the damage to you both, avoiding mismatch of expectations, the management of differ-ent personalities and approaches to research and writing, and other issues, for the future.

If taking on a new student

- Find out all you can about their work to date – read it, read the proposal, ask about time planning and staged work.
- Hold early, structured, planned supervisions to establish ground rules, time plans, and ways of working.
- Expect that some change of direction, some re-focus and replanning might be necessary but keep this to the essential minimum – this is not the time to totally reframe someone's work unless it is absolutely not on course and poorly designed, stuck, etc. Your 'take' on the work might be fine, but if when continuing with a different 'take' the current direction is equally fine, then it might be safer to support the student as he or she proceeds with the planned research rather than completely reworking it.
- Be reassuring as well as challenging – this is a moment for the student to clarify, defend and maybe rework somewhat. This activity is like a mock viva or mock exam – it gives the student an opportunity to reflect, discuss the project with someone new and see if it is making complete sense/sounds effective/is likely to succeed – and then to re-own the project

You might like to think about how you and your students can cope with such changes and what planning and activities could help minimise problems the changes produce.

Our broader work with students' wellbeing and emotional resilience and

the contribution which supervisors can make to this, has produced some advice from the students and the supervisors who have come to the symposia following the research (ESCalate Doctoral Learning Wellbeing project, Wisker et al., 2010), which you might find useful to share with your student. To be effective and resilient they suggest:

• persistence and motivation
• investment in self
• identifying what's good and building on it
• retaining motivation to keep going and complete the doctorate
• maintaining a good work/life/study balance
• allowing flexibility to deal with life issues as they arise
• working and writing at a steady pace throughout, to avoid last minute panics
• realistic goal setting
• careful planning
• keeping in regular contact with supervisors and peers
• remembering the huge investments of time, money and energy that have been made
• focusing positively on achievements to date
• remembering the original reasons for wanting to undertake a doctorate
• visualising success and imagining future possibilities and opportunities which will open up once the doctorate is completed, for example, teaching work and post-doctoral publications
• taking ownership of the process and focusing on the goal of success or completion – journeying to the top of a mountain
• sense of personal investment in fulfilling a lifelong ambition, also indicating the role of peer support in keeping on task.
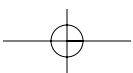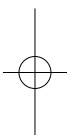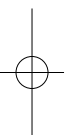
▶ **Conclusion**

The research journey is a long and arduous one, with as many delights and surprises as taxing problems and false starts. It has been shown to fundamentally interlock both the personal and the intellectual at every stage, so thinking about the personal, learning and institutional dimension right from the start of the journey should be helpful for your students. It is also helpful to share with them some of the research findings from projects which have looked at trials, tribulations, and managing and working with the research process through institutionally supported processes, such as progress reports, through interactions with supportive and developmental supervisors

and communities, and through the development of emotional resilience. It is a many-faceted developmental and support process involving the whole person with the research journey. Some of the strategies identified from the ESCalate Wellbeing project and augmented by supervisor development groups with whom the students have worked could provide helpful pointers. You might consider how these could be taken into your own supervision practice and into the institutional frameworks which scaffold and support that practice.

▶ Further reading

Gurr, G. (2001) 'Negotiating the "Rackety Bridge" – a Dynamic Model for Aligning Supervisory Style with Research Student Development', *Higher Education and Development*, 20(1), 81–92.

Kearns, H., Gardiner, M. and Marshall, K. (2008) 'Innovation in PhD Completion: The Hardy Shall Succeed (and Be Happy!)', *Higher Education Research and Development*, 27(2), 77–89.

McWilliam, E. and Hatcher, C. (1999) 'The Taming of Trauma: Or How to Be Properly Emotional', *Southern Review*, 32(2), 212–19.

Morris, C. and Wisker, G. (2011) 'Troublesome Encounters: ESCalate final report', Higher Education Academy.

Murray, R. (2002) *How to Write a Thesis* (Buckingham: Open University Press).

Owler, K. (1998) 'Subject to Closure: Meditating on the Doctoral Process', PhD thesis, University of New South Wales, Sydney.

Wisker, G., Morris, C., Cheng, M., Masika, R., Warnes, M., Lilly, J., Trafford, V. and Robinson, G. (2010) 'Doctoral learning journeys – final report of the NTFS funded project'.

Wisker, G. and Robinson., G (2012) 'Doctoral "orphans" : Nurturing and supporting the success of postgraduates who have lost their supervisors', *Higher Education Research Development*.

Part 4

Managing the Research Process to Completion and Beyond
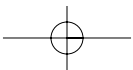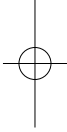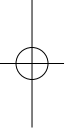
18 Writing up the thesis or dissertation – quality and standards

This chapter considers:

- *definitions of a successful thesis or dissertation*
- *quality and standards*
- *writing up a thesis or dissertation*
- *writing up a conclusions chapter and its relation to the research*
- *factual and conceptual conclusions*

Chapter 9 looks at forms and processes of writing, overcoming writing blocks and developing good writing habits. A later chapter will extensively cover preparation for the viva, but this chapter considers what examiners are looking for in terms of the written dissertation or thesis, and how to encourage and empower your student to produce a thesis or dissertation that examiners should want to pass. Students need to ensure the research question or hypothesis is clear throughout their work, structuring the research and underpinning the dissertation/thesis. If they haven't already done this, now is the time to revisit and stick the research question/hypothesis at the front of their computer screen so that everything in their final writing is relevant to its exercise, the expression of the research journey and value of the findings. The question might well have changed over the years of the work, and the hypothesis may have been replaced by another, in relation to ongoing discoveries and understandings. Social scientists and humanities students probably defined their own question in agreement with the supervisor or supervisory team. For those undertaking scientific research, there could be a problem which has been decided on by the supervisor, a hypothesis with which to engage which has been produced by an ongoing project, although not all science researchers join project teams. Some in the non-clinical end of the health sciences, in particular, might well be developing their own

research questions and conducting research for which the design resembles that of the social sciences in shape and journey. Some social scientists join project teams and will, like the scientists, need to both contextualise their own work in that of the team, and differentiate its achievement. In Sweden, for example, many PhD students write up to four publishable articles, and a 'wrap' which coheres their theorising, journey, argument and findings, so that the monograph is not the same shape as the more conventional PhD but resembles that produced 'by publication' (explored in Chapter 16).

The successful dissertation or thesis is structured along a continuum according to two main kinds of concerns: the journey and the structured argument. For both scientists and social sciences or humanities students, it is an articulation of the research hypothesis or question, conceptual framework in action, design in practice and expression, theorised exploration, and discussion and interpretation of the learning achieved, and the new knowledge and understanding produced. It is also a reflection and expression of a research journey of surprises and challenges, discoveries and development of /furthering of understanding, scaffolded by a conceptual framework which guides the research and interpretation processes. The dissertation/thesis vehicles this, communicates and articulates it, where 'articulate' means both helping to hang it together in a structured fashion (like an articulated lorry in the UK) and enabling clear, coherent, well argued expression. Probably more for social scientists and humanities students than scientists, the dissertation/thesis gives a flavour of the research journey as a personal, somewhat impassioned experience, one with plans, hard work, commitment, personal context and interest. In the actual research for all disciplines there are surprises, diversions, choices which can be defended, and explanations about activities, methods and interpretations of what was and was not chosen, decided, and why. A good thesis/dissertation is also a well-constructed, clear, coherent piece of work resembling a building or a piece of architecture.

These are metaphors of personal exploration and the construction of an artefact that stands alone and will last – scaffolded by a conceptual framework; filled out by sound research and the expression of that; and fuelled by hard work, decisions and the making of learning leaps. As your students start to write up final drafts of their work, they need to be absolutely clear about:

• their hypothesis or research question (depending on their discipline)
• the research design and how it has been achieved in practice
• conclusions and how to express them
• the quality of the writing

- the appropriateness of the structure of the written thesis or dissertation
- examinable quality and how their work will measure up against the expected characteristics of a successful dissertation or thesis
    - what the examiners will be looking for:
    - research design (as a plan)
    - research design in action
    - what they found and how they interpreted it
    - their research journey – risk, challenges, changes, problems, surprises, revelations, considerations
    - their conclusions
    - the worth of their work; why it all matters.

Elsewhere, we look at developing and encouraging good writing (Chapter 9); the examination process, examiner expectations and behaviour (Chapter 19); the viva (Chapter 20); and at the architecture and journey of the thesis or dissertation. This enables supervisors to work with students to produce and be able to discuss a piece of written-up research that has organisational coherence, which argues, builds logically and also reflects the intellectual journey undertaken and the enthusiasm and excitement that suggests. We revisit the research design: initially for a social science or health-related thesis or dissertation, then a literature thesis or dissertation, since students of literature often find it difficult to conceptualise their work along lines seemingly more suited to social scientists and health practitioners. We consider inductive and deductive research designs and how they can be mapped out in practice through to conclusion.

▶ Inductive and deductive research designs in action

For *inductive* research we often (but not always or exclusively) use qualitative methods and consider, finally, issues of *validity*, that is, how 'true' or legitimate it all is given the evidence presented in terms of the question, theorising, literature, design, research, context, sample, methods in action, analysis and interpretation of findings.

Alternatively, for *deductive* research we often (but not always exclusively) use quantitative methods and consider, initially, issues of *reliability*, that is, how far someone else could try out an experiment, use the same methods of data collection and come up with the same results. It is *dependable* as a design in action (see Figure 18.1) and generalisable, i.e. others can carry out the same experiment or research practice and will gain the same results.
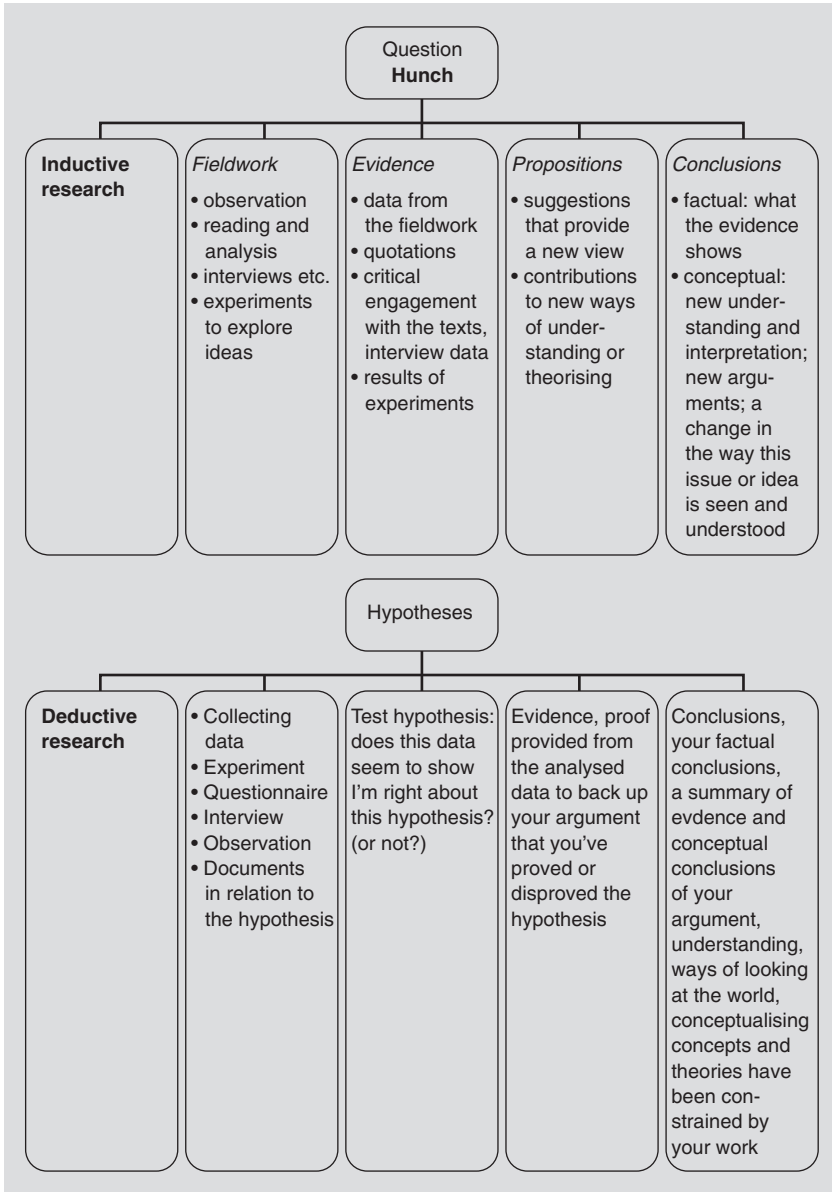
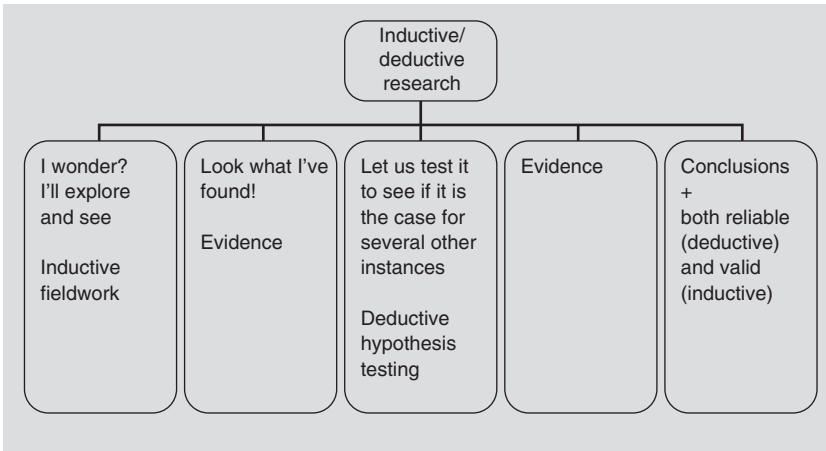FIGURE 18.1   INDUCTIVE AND DEDUCTIVE RESEARCH DESIGNS

FIGURE 18.2   INDUCTIVE AND DEDUCTIVE RESEARCH – AN EXAMPLE

This might seem obvious, but some students use both inductive and deductive approaches at different times in their research. They need to be able to know and defend why they use them, to what ends, and how they articulate or lock them together. In a combination project:

(1) A research question can be explored using, for example, interviews and focus groups.
(2) Data is analysed, interpreted, and findings produced.
(3) An assumption or hypothesis is built arising from interpreting the findings, and then this is tested out under controlled conditions (as far as possible, because the participants are people and so they differ), with greater numbers, probably several times.

The findings and the contribution to knowledge expressed in the conclusion can now be said to be valid (appropriate, well designed, coherent, well conducted research), reliable and generalisable (the process can be repeated with the same results, and is applicable to many cases).

▶ Quality framework, standards and expectations at different levels

In the UK, the Quality Assurance Agency (QAA) has produced a framework within which there are definitions of the standards, criteria and quality expected at each stage in a student's achievement. For the master's, there

are several modules which would enable a student to fulfil the level descrip-
tor expectations, while for a doctorate it is the thesis which fulfils these.

It could be useful to share the descriptors and expectations with students,
as well as supporting their writing development and offering them models, to
see the expectations in action in the work of others, so that as they write
their work up they can determine whether they are evidencing and achieving
the levels (QAA framework, 2008a). It is also useful to identify what the
different levels expect with regard to contesting and developing knowledge
and undertaking research. Work carried out by Professor Mick Healey and
colleagues, especially in the recent National Teaching Fellowship project
focusing on the capstone module, which enables the achievement of
honours and normally is the dissertation or major project, can also help with
definitions towards which students can develop their expression and organi-
sation.

▶ The master's dissertation or thesis

Both taught master's and master's by research contain an element of a
dissertation or a thesis. The differences lie in the length, breadth, depth and
scope of the work being constructed and presented. For a taught master's,
coursework will comprise 20- or 30-credit modules accompanied by appro-
priate assessment, with something like the equivalent of one 3,000–5,000-
word essay, or an artefact, programme, process, or product, e.g. a video, and
an analytical, critical write-up. Usually there is a dissertation or thesis for 30
or 60 credits, substantial in length, between 15,000 (30 credits) and 25,000
words (60 credits). Every scheme has its own rules, so students are advised
to consider the rules on length, layout, and the house style, in terms of
presentation, references, diagrams, bibliographies and appendices. As they
finally write up, many students find it useful to work with support from
others, who can proofread and act as a 'critical friend'. A research group can
also help with this by commenting on parts of early drafts.

Bachelor's degrees with honours are awarded to students who have
demonstrated:

- a systematic understanding of key aspects of their field of study, includ-
  ing acquisition of coherent and detailed knowledge, at least some of
  which is at, or informed by, the forefront of defined aspects of a disci-
  pline
- an ability to deploy accurately established techniques of analysis and
  enquiry within a discipline

- conceptual understanding that enables the student:
  - to devise and sustain arguments, and/or to solve problems, using ideas and techniques, some of which are at the forefront of a discipline
  - to describe and comment upon particular aspects of current research, or equivalent advanced scholarship, in the discipline
- an appreciation of the uncertainty, ambiguity and limits of knowledge
- the ability to manage their own learning, and to make use of scholarly reviews and primary sources (for example, refereed research articles and/or original materials appropriate to the discipline).

Master's degrees are awarded to students who have demonstrated:

- a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of their academic discipline, field of study or area of professional practice
- a comprehensive understanding of techniques applicable to their own research or advanced scholarship
- originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline
- conceptual understanding that enables the student:
  - to evaluate critically current research and advanced scholarship in the discipline
  - to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.

Doctoral degrees are awarded to students who have demonstrated:

- the creation and interpretation of new knowledge, through original research or other advanced scholarship, of a quality to satisfy peer review, extend the forefront of the discipline, and merit publication
- a systematic acquisition and understanding of a substantial body of knowledge which is at the forefront of an academic discipline or area of professional practice
- the general ability to conceptualise, design and implement a project for the generation of new knowledge, applications or understanding at the forefront of the discipline, and to adjust the project design in the light of unforeseen problems
- a detailed understanding of applicable techniques for research and advanced academic enquiry.

▶ **The EdD and PrD**

The EdD or doctorate in education is an increasingly popular route for education practitioners to gain a doctorate, while the PrD or professional doctorate is sought, for example, by health professionals. They are generally characterised by professional orientation, substantial taught elements, modular structure, and the production of a series of staged progress reports, enabling students to write up gradually, focusing on the theoretical perspectives, revisiting research design and early findings, and producing drafts.

The Open University EdD, for instance, states that their MA is Part A, and Part B is the doctoral-level work (which lasts for two years, in two stages). EdD/PrDs are often credit-rated and the shape will vary. In the Open University, the final report is 50,000 words and builds on a number of progress reports, each of differing amounts of between 3,000 and 15,000 words. The development and success of these two variants on the PhD recognise the importance for career professionals to explore, theorise and research their own professional practice and to feed that theorised, research-based exploration and richer understanding back into their practice, so enhancing it and also enhancing the professional area itself as research-informed decision-making and interpretation enriches and deepens professional practice.

▶ **Definitions of a good dissertation or thesis**

There is now a wealth of literature internationally which defines the undergraduate and master's degrees and their dissertations and defines the doctorate. Some of this literature also gives supportive developmental suggestions about how to achieve these qualifications and produce the quality and kind of work which merits the awards. Some of these are mentioned in Chapters 1 and 2. As supervisors we might find this is helpful to engage students in the identification of their goal and their research journey, in addition to the crafting and supportive work we carry out with them on their own doctorates. Trafford and Leshem (2008) offer explicit definitions and guidance, suggesting students should start from the end, work out what examiners seek in a successful doctorate, and ensure theirs is fit for that purpose. University websites and even school or departmental websites frequently give their own flavour to the definition of what a PhD is.

Advice from a variety of university websites on writing the thesis and undertaking a vivia is a mixture of both the highly formal, noting regulations and protocols, and the informal, suggesting behaviour, and giving wise

comments to reduce stress and involve others in the final throes of your work. Some of the suggestions include:

Originality and contribution

A PhD is a contribution to knowledge, the construction of new knowledge.

It shows the acquisition of appropriate knowledge which is managed and marshalled into proof of the candidate's reading, their understanding, and in defence of their own argument and contribution.

To count as 'knowledge' the thesis must show that the work undertaken uses appropriate data collection and data analysis methods to ask the research question or test the hypothesis.

It is important to clearly show how the work adds to knowledge incrementally, and/or creates something new.

The work needs to be new to both the researcher and the research community.

If the PhD claims it is entirely new – this could signal not having read widely enough in the field and not having spotted the links and ongoing dialogues in the field.

What a PhD is and what it isn't

A PhD demonstrates your mastery in and contribution to a field, so merely putting in three or more years' work and a 'diary' of that work will not in itself gain you a PhD. There has to be a contribution, a dialogue with the other work in the field, and your own argument running through the work.

A PhD is more than an extended undergraduate or master's dissertation. It has to have critical analysis, and conceptual, critical, sufficiently creative work. It is your own work, you did the research and you wrote it, even if it is part of a larger funded project, you still have your own slice, your own defined contribution expressed in the PhD. However, it can also be enormously useful to work with critical friends, and peers to respond to your work in progress, cause you to clarify, answer questions, tighten up arguments and defence, so it not just an isolated process. In its production you are already part of an ongoing scholarly community.

You are your own first reader and editor, and your colleagues and supervisor are second readers. Asking friends and colleagues to read your work will help ensure that it is readable – you might need to make changes to that end.

It is not an endless journey – you need to stop and get it finished when your supervisor indicates and you know that it is ready to be finished and to submit.

▶ Level of work: master's or doctorate

In their Quality Assurance Agency-commissioned report on the doctorate: 'Doctorateness – an elusive concept?' Pam Denicolo, Chris Park, Janet Bohrer and Gill Clarke (2010) talk of the 'new variant PhDs' (Park 2005) and the need for all varieties of the doctorate to be underpinned by and conform to the QAA Academic Infrastructure, as indeed do undergraduate and master's qualifications.

Winter's definitions of doctorate-level work build developmentally upon master's level and undergraduate work (see Winter et al., 2000). Critical reflectiveness is a key element in defining a master's course outcome, but various elements of the dissertation are elided, and the originality of the contribution to knowledge is less than for a doctorate. So, with a master's degree:

- a balance is maintained between original and secondary material
- methodology and data analysis are scarcely separated
- different investigative paradigms and their methodologies are understood
- there is critical self-appraisal of existing practices and beliefs
- work reaches a synthesis based on creative connections between different aspects of a problem or topic
- a commitment to and engagement with a project/discipline/body of reading is set alongside theoretical and ethical grounding.

All of these elements of quality will also be found in an MPhil or PhD thesis, but in Winter's accumulative model there are also some extra, deeper and more complex outcomes that help define higher-level work.

Winter's work was early on in the defining of doctorateness, and has informed definitions which have followed it. In the UK, the QAA builds on the Trafford and Leshem 'stepping stones' model (2008) and work by Denicolo (2004) to describe qualities expected in a doctorate and to suggest that successful doctorates will exceed these essential qualities. One of our respondents in our work on examiner experiences of assessing the doctorate and expectations of qualities of a successful doctorate talks of 'the magic ingredient' (2011).

'Criteria of doctoral assessment have traditionally focused on the output (usually the thesis), as opposed to the doctorateness within it or that gave rise to it' (Denicolo et al., 2010, p. 2). Trafford and Leshem (2002b, p. 41) identify '"scholarly components": contribution to knowledge, stated gap in knowledge, explicit research questions, conceptual framework, explicit

research design, appropriate methodology, "correct" fieldwork, clear/concise presentation, engagement with theory, coherent argument, research questions answered, and conceptual conclusions'. This is a good checklist, and in the QAA's view 'necessary but not sufficient criteria on which to base judgements of the doctorateness of any particular piece of research, because the whole is greater than the sum of the parts' (2010, p. 3), not least because of the changing nature of the doctorate itself. Current challenges are 'to reform doctoral assessment to meet contemporary situations whilst maintaining continuity and congruence with the past' (2010, p. 3). Current work on the qualities and outcomes of a doctorate indicate:

> Many university regulations stipulate that the volume of work expected is that which could be 'reasonably produced' in the equivalent of three years of independent study. In creative arts, as already mentioned, the thesis may take the form of an artefact and a commentary – again, this is entirely appropriate for the field of study. Most doctoral examiners are looking for work of peer-reviewed publishable quality in the discipline. (QAA, 2011a, p. 14)

Ways of determining equality and 'the need for equivalence in the different types of UK doctorate, and similarity across disciplines seems vested in the examination and oral/viva processes (which might sound a little circular)':

> One of the ways in which this can best be achieved is to demonstrate that doctoral candidates face similar intellectual challenges, both during their programme and at the point of final examination. The UK doctoral assessment (thesis and viva together) provides evidence of equivalence at the end of the programme in that all doctoral candidates experience a similar format, i.e. assessment of the thesis followed by the closed oral examination, with two or even three examiners.   (QAA, 2011a, p. 15)

We will consider working with further research evidence-based indications of what examiners seek in doctoral-level work, and how they process a thesis, in Chapters 00 and 00. Meanwhile, it is useful to revisit the expected components and consider asking our students to audit their work to see where they feel they have achieved these elements, what parts of their work need to be further enhanced, and how, if they are still working towards this achievement, their work might legitimately differ from what is expected yet still achieve the doctoral quality expected. I have expanded on the two sets of criteria to try and ensure that students from a wide variety of disciplines could carry out the audit usefully with you, but you might like to add other elements which are discipline-specific essentials.

Task – the audit

Consider with your students the different categories of achievement and quality, the different components and 'added extra' necessary in a PhD, and together review and reflect on the developing dissertation or thesis. Ask your student:

Please audit your work as if you were an examiner reading it for the first time and looking for characteristics of doctorateness.

Where do these elements and components appear in your work?

If you have not yet developed these elements or components, what can you do in different parts of the thesis to make sure you improve on it?

If you think you have something else to offer in addition, please consider how your work might legitimately differ from what is expected. Where and how might you show this?

- Does your students' work have these qualities and components? If so, where could they prove or show they exist?
- If not, could they write up to ensure that these qualities do exist within it?
- What further work needs to be done? And where?

Satisfactory   Location in text   Needs further work

Clear, appropriate and well worded abstract,
Stated gap in knowledge,
Explicit research question(s) or hypothesis,
Explanation of context and passion/engagement,
Conceptual framework,
Engagement with the literature in a dialogue,
Explicit research design,
Appropriate methodology, methods and defence of these,
Explanation of reasons for choices of methodology, methods, research design,
'Correct' and appropriate fieldwork/experimental work/artefact construction explained and defended,
Clear/concise presentation,
Engagement with theory throughout,

Coherent argument,
Evidence and related claims,
Interpretation of data and evidence,
Contribution to knowledge,
Research questions answered,
Factual and conceptual conclusions.

Richard Winter's (Winter et al., 2000) suggestions expand the terms defining a PhD. Unpacking these and explaining how and where they might appear in the thesis could form the basis of a useful discussion or audit for the work as it approaches completion.

Positive features of postgraduate (MPhil, PhD, EdD, PrD) research

Intellectual grasp
- grasps the scope and possibilities of the topic
- shows diligence and rigour in procedures – catholic and multifactoral approaches to problems
- shows readiness to examine apparently tangential areas for possible relevance
- grasps the wider significance of the topic – how the analysis is related to its methodological and epistemological context
- shows iterative development, allowing exploration and rejection of alternatives
- possesses an internal dialogue – plurality of approach/method, to validate the one chosen
- a broad theoretical base is treated critically
- demonstrates a coherent and explicit theoretical approach fully thought through and critically applied – that is, noting its limitations
- gives a systematic account of the topic, including a review of all plausible possible interpretations
- demonstrates full mastery of the topic, that is, that the candidate is now an expert in the field
- indicates the future development of the work
- maintains clear and continuous links between theory, method and interpretation
- presents a reflexive, self-critical account of relationships involved in the inquiry and of the methodology

- connects theory and practice
- displays rigour.

Coherence
- displays coherence of structure (for example, the conclusions follow clearly from the data)
- skilfully organises a number of different angles (required by the extended length of the work)
- is cogently organised and expressed
- possesses a definite agenda and an explicit structure
- presents a sense of the researcher's learning as a journey, as a structured, incremental progress through a process of both argument and discovery.

Engagement with the literature
- displays comprehensive coverage of the field and a secure command of the literature in the field
- shows breadth of contextual knowledge in the discipline
- successfully critiques established positions
- engages critically with other significant work in the field
- draws on literature with a focus different from the viewpoint pursued in the thesis
- maintains a balance between delineating an area of debate and advocating a particular approach
- includes scholarly notes, a comprehensive bibliography, and accurately uses academic conventions in citations.

Grasp of methodology
- the methodology is clearly established and applied
- the methodological analysis indicates the advantages and the disadvantages of the approach adopted
- uses several methodologies for triangulation.

Presentation
- the thesis is clear, easy to read and is presented in an appropriate style
- it contains few errors of expression
- it displays flawless literacy.

▶ **Originality and publishability**

These two terms are often used as the fundamental 'criteria' for a PhD. This section attempts to give more guidance on how to interpret them. An MPhil might have less emphasis on these elements.

Summary of terms 'originality' and 'publishability'

'Originality'
- pushes the topic into new areas, beyond its obvious focus
- makes an original contribution to knowledge or understanding of the subject, in terms of topic area, method, experimental design, theoretical synthesis or engagement with conceptual issues
- solves some significant problem or gathers original data
- reframes issues
- is imaginative in its approach to problems
- is creative yet rigorous
- goes beyond its sources to create a new position that critiques existing theoretical positions
- uses the empirical study to enlarge the theoretical understanding of the subject
- contains innovation, speculation, imaginative reconstruction and cognitive excitement – the author has clearly wrestled with the method and tried to shape it to gain new insights
- is comprehensive in its theoretical linkages or makes novel connections between areas of knowledge
- opens up neglected areas or takes a new viewpoint on an old problem
- something new must have been learned and demonstrated, such that the reader is made to rethink a stance or opinion
- shows 'a spark of inspiration as well as perspiration'
- shows development towards independent research and innovation
- is innovative in content and adventurous in method, obviously at the leading edge in its particular field, with potential for yielding new knowledge
- makes a personal synthesis of an interpretative framework
- shows depth and breadth of scholarship, synthesising previous work and adding original insights/models/concepts
- argues against conventional views, presents new frameworks for interpreting the world

---

> • applies established techniques to novel patterns, or devises new
>   techniques that allow new questions to be addressed.
>
> *'Publishability'*
> • demonstrates publishable quality or potential for publication
> • publishable in a refereed journal with a good scholarly reputation
> • written with an awareness of the audience for the work
> • stylishly and economically written.
>
> <div align="right">(Winter et al., 2000)</div>

For each section, your students could stop, review their work, judging how
far it evidences these characteristics and where, and if it does not, what
work needs to be done to enhance it. Questions examiners ask are based on
expectations that the evidence of these characteristics will be clear in a
successful thesis.

A thesis of merit will have all or most of these aspects, that is, publisha-
bility; coherence; sound methodology and a good grasp of the literature in a
dialogue; originality; a sound intellectual grasp of the issues, reading and
concepts; and an original contribution to fundamental and important argu-
ments within the area.

▶ **Writing rhythms and support**

It is never too early to start writing up drafts and, as supervisors, we should
encourage our students to start writing in the first month or so to try out
ideas and arguments. Supervisors in our research (Wisker et al., 2010) have
suggested that it is only when students start to form and express their ideas
that supervisors can see where the qualities of the research and understand-
ing lie, and so determine what support to offer with the work from then on.

As explored in Chapter 9, developing a regular writing rhythm will help
refine expression, maintain momentum and clarify thoughts and findings.
This gives a sense of development and often helps clarify difficulties. It is
also useful to help monitor students' progress in relation to thought and
expression (see Chapter 9 on encouraging good writing).

Once your students have produced a nearly complete first draft, ask them
to audit their thesis or dissertation in the following ways:

1 By looking closely at a couple of paragraphs, noting: presentation, argu-
   ment, relationship to the research question, logic, clarity, referencing,

grammar and punctuation. Ask them to mark these paragraphs and rewrite them to ensure coherence, sound argument, etc.

2   Rehearse the abstract with them orally, ask them to write down what they say, changing it to the third person and past or passive. Ask them what this research set out to argue, find, prove or test, and briefly how it did this. What factual and conceptual conclusions (contributions to knowledge and meaning) can it now offer, argue or prove?

3   Look through the dissertation or thesis as a whole, considering:
   •   How clearly is the research question stated?
   •   How logically does the research design enable the student to ask the research question?
   •   Is the evidence thorough and clear? Does it back up the research claim?
   •   Are there interpretative, conceptual as well as factual conclusions?

▶ Coherence and the structure of the thesis

The thesis needs to be coherent overall. Underpinning questions or hypotheses and theories need to be explicit and to inform the exploration, investigation, experimentation or examination that is the research. They need to be contextualised in terms of the field and the theories informing, underpinning and driving the set of questions and area of investigation. Research methodologies and methods need to flow obviously from the questions, the reading and the theories as the clearest (defined) ways of investigating and asking the questions or testing the hypotheses. The findings need to be discussed and interpreted. Figures, graphs and tables should be selected and integrated into the discussion – explored, explained and analysed, interpreted then theorised and argued through, contributing to the overall argument. Finally, conclusions are both factual – what has been found, what information and knowledge has been added to or produced – and conceptual – explaining how understanding has been deepened, meaning added to and enriched and why the work matters. Students often suddenly stop work when they come to the conclusions and try and sum up the thesis in short, to get to the end of it. This is really a very rich part of the work and needs a lot of attention, not least because the examiner tends to read both the abstract and the conclusions really closely, since these parts of the thesis identify the reason for the work and what it contributes to our understanding and to meaning. The conclusions need to not merely reiterate the introduction or produce the thesis in short, but instead should round off, finish off and clarify the effects and the importance of what has been found, what it means, why it matters

and what might be done with it. At this stage in writing up, the level of the research should be clear. The justification for the award emerges from the coherence and importance of the questions, and the significance of the findings as finally tied together and made explicit in the conclusion.

Structurally there needs to be a logical flow of information and argument between the different sections of chapters and between the chapters themselves. Quotations, tables, figures and graphs, in extract, need to fit in with the text. They should be explored and explained in the text rather than left to stand alone or laboriously described.

Hierarchical headings and subheadings should indicate the significance and linking of different key parts of chapters, so a reader senses how they relate to each other, building and flowing between items or sections.

Use of the first person

Many readers fear writing as 'I' or 'we', although this is acceptable in feminist research practice and in using the self as a case. Certainly, if they are using themselves as a performative work, in relation to theory, it would be absurd to hide this with the third person. Check the norms and conventions of your university and subject, and advise consistency. There is a great difference between using 'I' when merely asserting an opinion and using 'I' when indicating that the writer himself or herself carried out the research, or had a personally experienced, evidence-based claim to make. Students might feel more comfortable with third person passive ('interviews were transcribed'), or identifying roles ('the researcher discovered'). Indicating the researcher's views can be achieved by the use of value-laden adjectives and adverbs: 'this sound argument', 'unnecessarily, it is argued that', 'Adams assesses more coherently than Bogs that ...', rather than an opinionated 'I think that ...'.

Style of presentation

Examiners, like reviewers, tend to zoom in on presentation errors. Your student needs to ensure that:

- page numbers are in order,
- there is a good visual layout of pages – so headings don't appear at the bottom,
- you have carefully checked all referencing,
- there is consistency.

As supervisors, we can indicate good practice, with feedback on some parts of the work acting as a model. Suggest your student asks a trusted colleague or friend to proof the whole, because although we are our first editor, we

often do not see our own mistakes. Often universities have editorial services, writing support and others who support students' writing. For international students, sometimes there is also translation assistance – not to translate a whole thesis but rather to advise on the appropriate choice of expression and words. It is useful to find out who provides this support and what the students can expect, then direct your students to develop and finalise their work using this support, if they would find it useful. In this way, you, the supervisor, are not working at the level of final proofing and rewriting, rather than at the levels of conceptual contribution, argument and coherence.

Thinking of the reader

A thesis ideally represents an interaction and communication between researcher, work, the field and reader(s). When your students have looked through the thesis and seen whether or not and where it does fulfil these expectations, they can prepare a defence of it ready for the viva. Suggest they scrutinise and evaluate other dissertations or theses for signs of the writer's criteria, coherence and readability, making notes about how to apply good practice to their own work accordingly.

The shape of the thesis

Title
This should appear on a separate title page, on one or two lines, and should be a clear statement suggesting the enquiry and assertions made.

Abstract
Usually about 300–500 words. This answers the questions: 'Why is this an important issue to explore, in context?' 'What does this research offer?' 'What does it argue, prove, contend?' 'Why was the research conducted in this way?' 'What has it achieved of importance?' 'What does it contribute to meaning and our understanding?'

Use the third person and passive voice, that is, 'It is argued that …', 'evidence is presented which suggests that …'.

The abstract is read *first* and so must clearly state aims, outcomes and achievements of the research in the dissertation or thesis. The theories and arguments should be presented in a clear and straightforward manner and be so interesting that the reader wishes to read on.

Preface and acknowledgements
Who do they want to acknowledge and to thank? Who helped? Leave no one out!

Introduction

This introduces the context for the research and how this piece of research fits into, grows out of, and extends other work in the field. It establishes the gap in knowledge, the boundaries to the research, the researcher's own position and why he or she undertook the research. Here it can indicate the passionate interest the researcher has and how important he or she felt it was to conduct the research. If this piece of research is part of a larger project, the student needs to very briefly and clearly fit his or her own work into the overall project and emphasise its individual contribution. It indicates how different elements of the research design have been carried out, so they are seen to lead to the detailed, actioned, evaluated research, and the analysis of the data is then discussed in specific chapters. The design of the research and the dissertation or thesis are introduced and explained briefly here. The introduction also explains the researcher's passion and enthusiasm for the research journey.

Review of the literature/theoretical perspectives

This should contain carefully explored, referenced work with the underpinning *theories* and the work of essential *theorists*, in a dialogue between the theorists and the researcher's own work. There is also engagement with the critics and researchers who have used the underpinning, theorised work of the theorists to inform their own research and have contributed to building up the field and to the debates involved in knowledge construction in the field. Themes, arguments and debates emerge and are introduced and explored here without being exhaustive, instead appropriately selecting the main contributors and their points to develop a sense of the dialogue and to contribute to it. It is crucial to ensure that the main underpinning concepts, themes and theories are explored here, as are key terms. They will then be referred to and woven throughout the rest of the dissertation or thesis.

Methodology, design of the study and methods

All researchers need to explore, explain and defend their methodology, for example, inductive, deductive, naturalistic; and the methods, for example, documentary analysis, experiments, interviews, case studies; and the design of the study, for example, sample, population, and which part of the research was undertaken in which order and why.

For scientists, the experimental method is relatively fixed, but still needs some explanation and details.

For health practitioners and those involved in an iterative process between theory and creative, critical, reflective, analytical work of any kind, this is where those stages and choices are explained.

Some literature and humanities students find this chapter difficult and relatively pointless because they are using critical practice, but this is the place to explore, define, explain and defend why they have, for instance, decided on a Marxist historicist reading practice involving interweaving historical and political debates and documents with their expression, reflection and symbolic representation in texts, and how they intend to work with the primary and secondary sources of several kinds: documents, novels, interviews and so on.

Asking structural questions of the work really helps to focus students on what they have done – why, how, to what ends – so helping them to eventually draw conceptual conclusions and defend the shape of the work and its achievement in a viva.

Presentation of results

This is a clear, *annotated*, selected and discussed record of what has been discovered in science, social sciences, education and health.

Discussion of results

For science dissertations or theses there is sometimes a separate discussion chapter, whereas in social science, health or education dissertations, the results and discussion are usually integrated. Tables, statistics, bar charts and so on appear in extract, and are discussed fully in the main text, with the narrative exploring and bringing in different results to develop arguments, presenting coherent points and findings. They might appear in full, or as examples in the appendices.

For a humanities or literature-based thesis and also often for a social science, health or education-based thesis, there are often several chapters exploring different themes and issues in a linked discussion, where the results or the data under discussion are used to form part of the argument.

Conclusion

Dissertations and theses have a conclusions chapter that serves two purposes: (a) to briefly summarise what was researched and discovered, challenged, proved, disproved; how this was done; and the main arguments and facts discovered – what has been added to knowledge and factual conclusions; and (b) to indicate conceptual conclusions (how arguments and reconceptualisations have been able to alter understanding, enabling us to see knowledge and interpretation of the world differently, and perceive new perspectives and meanings). The conclusion establishes the importance of the work, and, finally, indicates further work (recommendations perhaps and some models of other research and suggestions for change).

Appendices, statistical tables and illustrations
Tables, quotations and illustrations need to appear in extract, with discussion and analysis in the main text, and usually as examples (e.g. an indicative questionnaire, a participant consent form), or in full, if necessary, in the appendices along with, for example, interview transcripts and products made in the process of the research.

References
Students are advised to reference footnotes systematically and carefully throughout the text at the foot of each page or in endnotes at the end of each chapter. Some writers leave all the endnotes to the end of the thesis, collected chapter by chapter, and integrated with the references. References can be signalled in the text by a number (1), which leads to the endnote and reference, or by a shortened form of the actual reference, for example: 'Phillips, Estelle M. and Pugh, D. S. (1994), *How to Get a PhD: A Handbook for Students and their Supervisors* (Milton Keynes: Open University Press)' placed at the end in the references can be signalled in the actual text as: (Phillips and Pugh, 1994).

Bibliography
This is usually an alphabetical list which probably separates out the books, journals and internet sites from films. If the research is in literature, the critical works might well be separate from authors' works. It is a handy reference for any reader, and if the student is *not* using endnotes or footnotes, he or she will need to produce an alphabetical bibliography. Each university has its regulations and consistency is crucial, so students are advised to discover the university regulations, the disciplinary norms, and to establish an acceptable form and stick to it.

Presentation of actual thesis
Ensure students have read university guidelines about layout, typeface, presentation format, binding (usually not until after the viva) and references, and that their work conforms to all of these. Many dissertations or theses meet difficulties in examination just because of presentation (see Chapter 19).

▶ **Structures of research and the written text**

Students undertaking postgraduate work are involved in at least two projects:

1   The research, which follows a proposal, like a map, related to a concep-
     tual framework, meets peaks and troughs, risks, revelations and disasters
     and comes to conclusions.
2   The writing of the thesis, which accompanies the research but also has a
     more coherent final shape – tracking plans, actions, reflection, findings
     and evaluations – but finally presenting the whole as a coherent, well-
     shaped thesis underpinned by a conceptual framework.

While project (1) is more of a journey, with maps and some trips down vari-
able byways, project (2) is more a piece of architecture, seeming, in retro-
spect, to be built logically on firm foundations and finally standing up
coherently as a completed piece. For those undertaking practice- or work-
related research, there is a third process: the project related to and influ-
enced by the job, teaching practices, etc.

   Figure 18.3 shows action or practice-related research that is turned into a
postgraduate thesis or dissertation. Each section starts from the bottom and
moves on up. Work, the research and the writing of the thesis or dissertation
proceed alongside each other over time. In the end, only the dissertation or
thesis remains. Its architecture needs to be coherent and to stand on its own,
but the thesis or dissertation also needs to give the reader a sense of the
research journey, and in practitioner-based or action research, of the work
context. The figure suits action or practitioner-based research if all three
sections are considered. Sections 2 and 3, however, are common to all
research.

Problems of presentation
The greatest problem of presentation is one of rigour, cohesion and original-
ity. If a student has only gathered information, rather than moving the
boundaries of the study onwards and having something original to add,
contextualising the work, then this will show in the dissertation or thesis and
lower its quality.

Conclusions
Your student might find that writing the conclusions chapter is a clear, logical
exercise. However, many people find it as difficult as the abstract, and in this
event, many conclusions to dissertations, theses, essays and books are:

•   *rushed*: I've run out of time; there's nothing else to say.
•   *dull and empty*: I said it all in the text.
•   *filled with ideas and things you haven't already said*: there must be space to
     put all of this somewhere, the conclusions will do.

Work and life
⇑
Institutional politics and local changes
⇑
Relationships
⇑
Self and experience

Work
Work continues
⇑
Select a manageable part of work
⇑
Select a case
⇑
Action research focus and work
⇑
Recruit participants
⇑
Select an element to research
⇑
Everyday activities

Journey
⇑
Risks
⇑
Revelations
⇑
Problems
⇑
Choices
⇑
Byways and maps

Recommendations
⇑
Conclusions
⇑
Findings
⇑
Analysing data and interpreting it
⇑
Carry out more research
⇑
Re-plan and improve research (especially if a pilot, or in ongoing fashion)
⇑
Analysis of data and reflection
⇑
Conduct of research / fieldwork
⇑
Proposal: Conceptual framework question

Research
Building
⇑
Logic
⇑
Coherence
⇑
Defence

Thesis or dissertation
Conclusions – Factual Conceptual
⇑
Findings – Factual Conceptual
⇑
Analysis of results and discussion
⇑
Results
⇑
Design of study sample etc
⇑
Research methodology and methods
⇑
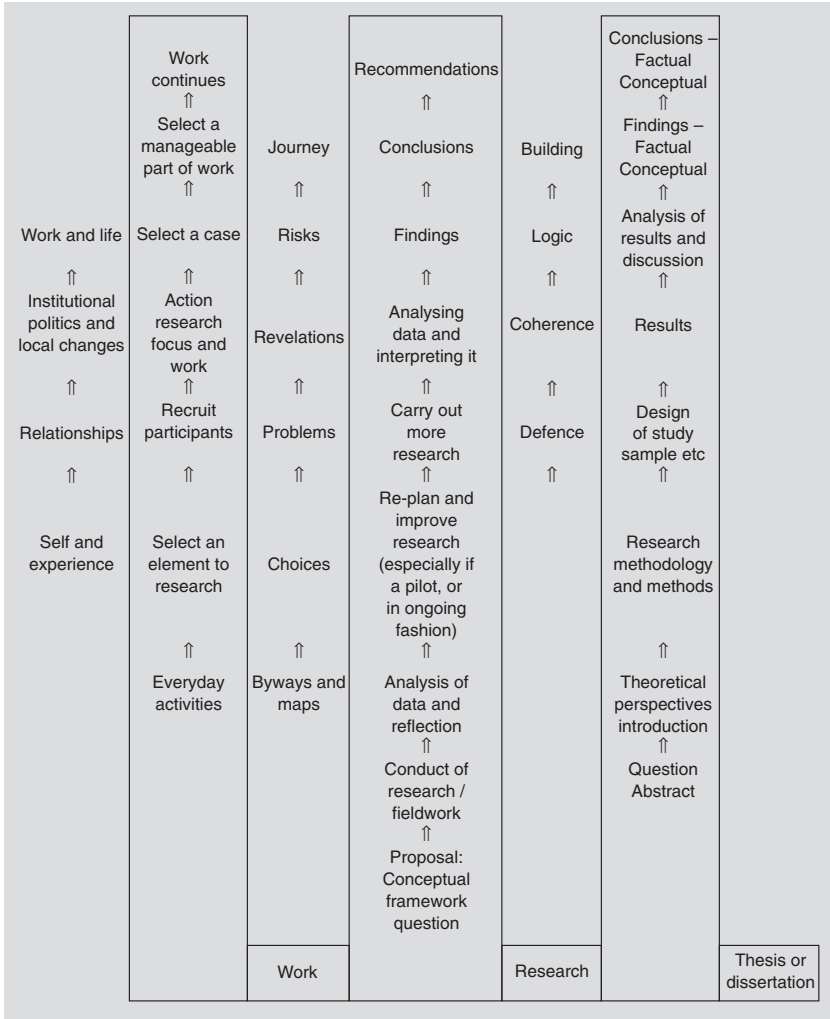Theoretical perspectives introduction
⇑
Question Abstract

FIGURE 18.3   HOW PRACTICE-BASED RESEARCH LEADS TO A THESIS

- *filled with recommendations*: I've done all of this work, now I must suggest what others should go and do as a result.

In practice, examiners and readers often tend to read the abstract, contents page, conclusions and references and then get into the body of the text, rather like we might scan a book. As such, then, the conclusions chapter, like the abstract, needs to be produced with very great care indeed. And, of

course, it is the key chapter to show what your students' contribution to knowledge really is in relation to their topic and question. After a brief reminder about the research topic and research designs, their findings, both factual and conceptual, should be the body of the conclusion.

A discussion or brainstorm followed by a writing exercise to draft a conclusion could usefully form part of a supervision activity or workshop in a research development programme, followed by a supervision. From discussion and feedback, the students can then proceed to writing a final version of their conclusion. To undertake the conclusion, students need to bear in mind the following points, which you could use as prompts:

1   Remind the reader of the research area and the questions or hypothesis which you have been exploring in your research (signpost).
2   Indicate and explain why it is important to ask the question or test the hypothesis now in relation to its topicality, context and why you wanted to undertake the work; and what your position contributed to that desire and your enthusiasm. Reveal the gap in knowledge and your commitment.
3   Argue why the research design, approaches and activities were chosen as absolutely appropriate to enable you to ask your question/test your hypothesis.
4   Explain what the research journey was, how it revealed surprises and problems and how and why it was reshaped (if it was) from the initial plan.

These four points re-introduce and *position* the research, as well as asserting its importance and topicality and how it fills a gap in knowledge. In addition, prompt your students to remember the following points:

5   Indicate, in summary, what your research has produced by way of *evidence* in terms of:

   • addressing your research question/hypothesis
   • relating in a dialogue with the work of others
   • how it has been/is informed, formed and interpreted by the underpinning and informing use of the theories and theorists and critics
   • how strong or weak it is, and where and why.

6   Develop factual conclusions, for example: 'In each of the 3 cohorts studied 1999, 2000, 2001 a number of students were found to exhibit dissonance between their approaches to learning (largely accumulative)

and their intended outcomes (largely transformational). There was a correlation between such dissonance and (i) the acceptance of the research proposal by the research degrees committee; (ii) students' ability to acquire and manage their data and to interpret the findings in relation to the outcomes sought as reflected in the research question itself; and (iii) likelihood of successful completion.'

7   Develop conceptual conclusions, for example: 'It can be argued then, that there is an identifiable connection between students' research-as-learning approaches and their intended outcomes as expressed in the research question, which shows itself at each stage of the students' research. While this connection can for some be seen as a best fit, that is the right approach, design and methods for the question to be asked and outcomes achieved, for others, the mismatch or dissonance between research-as-learning approaches, research design, methods and research outcomes causes severe problems at each stage in the research.'

This conceptual conclusion (and there could be/are others from the research) provides a contribution to knowledge. Your student needs to ensure that the contribution is clear. It could be expressed as a major conceptual conclusion from *this* research in that it changes or firms up our *thinking* about the links between research-as-learning approaches, design and methods, and outcomes. What is a particularly original contribution to knowledge, here, is that it operates with research as a form of learning.

▶ Undertaking a literature dissertation

Let us consider some of the stages of work and interaction between student and supervisor as a literature student undertakes his or her dissertation or thesis. The literature dissertation or thesis involves the development of the question and conceptual framework, leading to the 'Theoretical Perspectives' chapter.

Student: 'I want to look at contemporary British and American writers who write rather like Virginia Woolf – I'm interested in the way they deal with the construction and representation of the self ('I') and how this self relates to the world (and I wonder whether writers have to be using *realism* to explore and express this engagement).

Supervisor: This is a bit vague.

Thinks: Must help her refine it into a question – but meanwhile discuss/suggest student reads widely in a range of critical and literary issues both to refine the question and find the areas in which to read.

The following questions help to direct the student's reading and theorising:

1   Authors – who do you think you will use for this? Who fits into these ideas for you?
2   What are the *theories* or *concepts* that can help you structure your ideas and reading?

This will take you to theorists:

•   some on the *self* or *'I'* or *subjectivity* and its construction and representation (e.g. Erving Goffman)
•   some on *postmodernism*, because this is the theoretical framework with which such questions are asked and answered now. Have a look, too, at philosophers, for example, existentialists, phenomenologists (Sartre, Husserl, Merleau-Ponty).

This will also take you to critics:

•   Who else is looking at the self and at engagement with the world?
•   What are their critical views about the ways literary texts can ask and answer or deal with issues about the self in relation to the world and engagement – and why might we all be interested in this?

This is an early stage – setting students off to read, think about what (in social science terms) would be discussed as their *sample* from the field (authors and particular texts) and then to the *theories* – self, being, engagement, etc. and the *critical* arguments using such theories on texts, which they will find in different literary critics. They are asked to inform their reading with the kinds of theories and arguments emerging from the theorists and critics, so their own ideas and work start to enter a dialogue with these critics and theorists.

Methodology
The methodology is inductive – they are doing fieldwork. They develop an active involvement with applying the theories to their sample – their chosen reading – as they start and continue to clarify the ways the theories

and critical debates intersect with and help inform or interpret the texts. Some of these theories, critics and texts will be absolutely central as the argument of the thesis/dissertation develops. Others will turn out to be peripheral – not central to the emerging *argument*. This is a stage where *boundaries* begin to be further designed.

Methods

Methods will need to be clarified too. Literature students often state methods as reading and textual analysis, which is acceptable. They are also probably, and more specifically:

- determining how the formal elements of the text function to entertain, engage with issues and arguments in life and the world; engage with the times, culture, context, ideas of the time; and use *representational strategies* to do this, that is, imagery, symbolism, metaphor at the level of expression and structural links (networks of these relate to meaning and arguments), character, event, action, setting, time, and so on, *who* stands for what part of the author's argument, and exploration/articulation of ideas.

Which events, actions, storyline, etc. act or try out some of these ideas?:

- How do the structural elements of, for example, time, narrative and point of view also enable texts to ask questions, suggest things could be other- wise and cause readers to reflect on and try out new perspectives and perceptions?
- Students are developing elements of their critical text to represent, argue, engage and ask questions. This is at a different level from follow- ing and becoming immersed in a storyline or narrative (also necessary) and involves close reading, with a constant oscillation between the liter- ary text, theories and critics, to see how the theories and the critics can enlighten, inform, enhance and problematise our reading of the text.

Noting that:

- records of events, symbols, characters, etc. are some of the examples of *data* the student will take from the text to exemplify his or her argument, developed, informed and guided by the theorists and critics;
- actual words and phrases are also data;
- extracts from the theorists and critics are used to inform and engage with the dialogue between student, interpretation, and argument, theo- ries, critical views and the text.

There is a great deal of discussion, theory-building, interpretation and dialogue with critics and theorists to inform close reading and the developing argument.

Some textual analysis of other cultural and historical texts – historical documents, cultural artefacts, even images or music – might also form part of this carefully woven set of strands, that is, student argument, theorists and theories, views from critics, and elements of primary texts and secondary texts.

If these are the methods, they or others need to be defined at some place in the dissertation or thesis. Seeing quotations as data helps students to realise they need to develop their argument. The data are the evidence for the student's argument, from the source, in this case, authors' texts. Just like a social scientist or scientist, literature students will not need to include all their data, and their selection of a critical dialogue with it shows their awareness of how their question is being asked and answered, as opposed to just proving they can read and copy out large chunks. For scientists and social scientists, this equates to being able to process the data, and select and argue with it as evidence, as opposed to just delivering it in a totally raw lump for the reader to try and analyse. The latter would indicate difficulty on the part of the student in seeing *how* what they have discovered (data) actually translates into something related to their question, that is, findings, and also difficulty in selecting and arguing *what* they have discovered (data).

Main body of the text

Chapters
Chapters in the literary dissertation or thesis are not likely to be sectioned into huge numbers of subsections, but instead follow themes and historical or cultural differences and developments. Several of these are interlocked if the argument interlocks them, for example, there is historically and culturally affected argument about how realism is a 'better' form for exploring issues concerned with social problems and identity (e.g. culture, gender, class) than fantasy. So, roughly speaking, *engaged* writers up until, probably, the mid-twentieth century were expected to write some sort of realism (they didn't, but critics expected them to and evaluated them accordingly). Now, in the early twenty-first century, there are discoveries that many engaged writers have 'always' used fantasy to explore this engagement. Here we have a set of arguments that the student would need to:

• express as arguments
• get involved with and find evidence to argue a case

- also get involved with in terms of historical and cultural change and the development of ideas.

Conclusions
By the time students have several chapters explaining and arguing their way through this, they reach their *conclusions*. Here, their conceptual framework is evident, as are their theorists, critics and own ideas. Their *factual conclusions* will lead directly from the variety of ideas and forms of expression found in the chosen texts used as their *evidence*, while their *conceptual conclusions* will provide a new contribution to understanding and arguments – in this latter case, an argument or set of ideas that fantasy can also help explore and express engagement.

Literary research, as just explained, is *inductive* – it builds theory. So, too, does much social science, health, etc. research. The shape of the thesis shows the research design.

Concluding comments on conclusions
Students should ensure that the conclusions chapter is neither too long (i.e. rambling – summarising the whole dissertation), nor too short (saying nothing). In addition to factual and conceptual conclusions arising clearly from and fitting into the plan of the research question, hypothesis, research design and conceptual framework, the conclusions chapter should provide:

> The opportunity to leave your readers with a positive impression of the merit of your thesis as an exemplar of doctoral writing and doctoral reason (Trafford and Leshem, 2002b).

Additionally, the student's commitment to and enthusiasm for the research should shine through.

You might find it useful to work with your students to audit their dissertation or thesis so far. They can then measure what they need to do next to move forwards in their work, to improve it, and you can decide what you can do to support this development, and what they and others can do to support it. The elements of the audit are couched in such a way that they should prompt the thinking and the completion which will ensure that your student has a sound sense of what is required in a theorised record of a well thought through piece of research, which will be most useful in future work; is aware of what makes a good thesis or dissertation for examination; and also can start to check and improve the quality of their own work for examination and, where appropriate, for a viva.

Audit

- How far does your students' work show engagement with the theories and theorists' ideas in the field? Does the students' grasp and articulation of the context and theoretical perspectives show their work to be in a *dialogue* with theories and theorists, and that theories are clearly under-pinning and driving or informing their work?
- Do they build on explanations of why they have chosen their methodology and how this articulates with their question, theories and chosen methods?
- Do results and findings spring logically from and start to answer research questions and address the research hunches, explanations and problems?
- Have both factual and conceptual conclusions been drawn and do they develop both logically and coherently from the question and research design; establish a contribution to knowledge; and indicate further work?
- How are the chapters linked? – coherently with referencing back and forth between chapters; and between the research questions in their introduction? Are themes developed and both theories and theorists referenced throughout?
- Does it read like a story, with gripping, readable expression, and like a journey, stage by stage?
- Is it clearly expressed without *excessive* long words or 'fog'?
- Does it avoid unnecessary repetitions and achieve clarity?
- Is it well and clearly punctuated, grammatical and devoid of typos?
- Is it well and accurately referenced in the text and in the bibliography?

▶ **Further reading**

Denicolo, P., Park, C., Bohrer, J. and Clarke, G. (2010) 'Doctorateness: An Elusive Concept, (Gloucester: The QQA), www.qaa.ac.uk/standardsand quality/doctoralqualification/doctorateness.pdf, accessed 15 May 2011.

Dunleavy, P. (2003) *Authoring a PhD* (Basingstoke: Palgrave Macmillan).

Park, C. (2005) 'New Variant PhD: The Changing Nature of the Doctorate in the UK', *Journal of Higher Education Policy and Management*, 27(2), 189–207.

Trafford, V. N. and Leshem, S. (2002) 'Starting at the End to Undertake Doctoral Research: Predictable Questions as Stepping Stones', *Higher Education Review*, 35, 31–49.

Trafford, V. N. and Leshem, S. (2008) *Stepping Stones to Achieving Your Doctorate: Focusing on Your Viva from the Start* (Maidenhead: Open University Press), p. 19.

19 The examination process and examiners

I want to see lights come on in what the person is saying and what they've achieved.

thesis examination is as subjective as each thesis is unique.
(Examiner interviews, DLJ project, 2010)

This chapter considers the examination process from all perspectives: student, supervisor and examiner. Students producing dissertations, and those writing theses in Australia, are highly unlikely to be asked to take part in a viva. However, every dissertation or thesis is normally read by at least two examiners, so it is a significant moment for your student to have their work critiqued. For those undertaking a PhD, EdD or PrD in the UK, Europe and many countries other than Australia, there is also a viva to accompany the thesis examination. The doctoral viva and post-viva or post-examination corrections are discussed in Chapters 20 and 21. In recent work on the National Teaching Fellowship-funded project 'Doctoral Learning Journeys' (Wisker et al., 2010) we interviewed over 20 doctoral examiners and asked them about the procedures for examining, and how they identified the characteristics of a good or a passable thesis as representative of the quality of the research undertaken. We also asked them if and where there might be stages or moments in the thesis where the students were clearly showing their work at a conceptual, critical and creative enough level to gain their PhD. Some of the data from this research appears in quotations below and the overall understanding from it informs the chapter.

This chapter considers:

- *supporting your student to produce a thesis or dissertation of sufficient quality to pass the examination*
- *examiners' expectations of what constitutes a passable or good dissertation or thesis*
- *how examiners behave and respond*
- *learning from being an examiner yourself*

Training or development opportunities to become an examiner are still very rare, but as supervisors it is useful to be aware of how examiners approach their work, what qualities they look for in a good, or a passable dissertation or thesis, and so how to advise students to achieve those qualities in their own work. It might be useful to look at your *own* experience of being examined, and of acting as an examiner, to help guide your student. This can engage you in preparation for the examining you will conduct in the future. Such preparation is also usefully informed by remembering the positive and good practices of your own experiences of being examined (and turning the negative ones round to construct ideas for good practice).

Vernon Trafford and Shosh Leshem (2002b, 2008) suggest that students should consider the expectations and behaviours of examiners as they *begin* their research. Students are advised to consult Chapter 9, which identifies the characteristics of good postgraduate work, and to consult all the internal documentation they can regarding examiner expectations (see Graves, 1997; Phillips, 1994; Trafford and Leshem, 2002b).

Some of the discussions and suggestions about supervising students through to examination in this chapter are based on interviews with examiners, supervisors and successful doctoral candidates in the doctoral learning journeys (DLJ) NTFS-funded project (2007–2010) and my own 'parallel project', an NTFS-funded individual project (2005–2011), as well as my own experience of doctoral vivas and examination reports. There is now a wealth of research into the examination process and how examiners decide on evidence for the qualities of a passable or good dissertation or thesis, from Trafford and Leshem (2002b, 2008), Lovat, Holbrook and Bourke (2008), Bourke, Holbrook, Fairbairn and Lovat (2008), Kiley and Mullins (1998) and Kiley and Mullins (2002), in particular. Ideas explored in this chapter also arise from workshop discussions and responses with a range of supervisors and examiners, including Margaret Kiley, Margot Pearson and colleagues at HERDSA (Higher Education Research Development Society of Australasia)

conferences 2002–10, and EARLI (European Association of Research into Learning and Instruction) conferences, 2003–5, 2007, 2009, 2011.

Dissertations and theses are examined by both internal and external examiners. For supervisors, the examination of students with whom we have had such a close developmental relationship sometimes seems very much like an examination of our own expertise and interactions. Just or not, our reputation seems bound up with the quality, success or otherwise of the student's work.

When we consider how to prepare our students for examination, there are some underlying questions to consider, including: What are examiners looking for? What defines quality? How does the marginal dissertation or thesis differ from the excellent one? How might we support students to produce passable and in some cases excellent work? One of the main findings from our DLJ research was the examiners' awareness of evidence of students crossing conceptual thresholds in their dissertation or thesis. We have discussed this research finding earlier in Chapters (0) and (00). For examiners, there needs to be evidence that students are working at the appropriate critical, conceptual and creative level to gain their doctorate. Examiners also talk about 'going through a conceptual threshold' (Wisker et al., 2011) themselves in their reading and assessment of a thesis, a moment when it is clear that the work is intellectually rigorous, appropriately organised, coherent, well written and of publishable quality, and makes a sound contribution to knowledge.

One way of mitigating students' anxiety about their work being examined by up to three people who have not been supervising them is to suggest that they consider these experts as enthusiastic and specialist members of their readership, whose inside knowledge makes them interested in the work and able to provide quality feedback. Normally, undergraduate and master's dissertations are marked entirely summatively and the student is not expected to return to them to improve them, unless they fail. Normally, the doctoral thesis is marked both summatively and formatively, so students are given a set of comments and requirements, and in most cases there is work to do before the thesis is seen as final. The work to be done ranges from correcting the odd typo to a major rewrite and resubmission, with most students having some response midway in this continuum, since the work has, in most cases, already passed the scrutiny of the supervisor. Students worry about supervisors being overly cautious and retentive – holding them back when they want to submit – but often this is to ensure the final quality really looks as though it will achieve a pass with few modifications. However, sometimes in assessing the work of our own students, we have to let the thesis 'go' for examination when not quite perfect, acknowledging

that there will be some probably relatively unpredictable improvements and alterations requested by the examiners before it is seen to merit the award of a doctorate. Universities differ as to their expectations of minor modifica-tions. In some university systems the corrections are only required 'for the book', in other words, for when and if the thesis is published, while in most universities in my own examining experience, it is crucial to carry out even small changes before the thesis is bound and appears on the shelves of the library as a model to others..

What are the qualities of a passable or good thesis? These have been identified in the research literature probably beginning with Winter et al. (2000) and others (see above) and now explicit at each university in the documentation which accompanies the examiner information on assessing a PhD. Examiners in our own and other studies report that as they read the abstract, conclusions and introduction, then work their way through the thesis, there are moments early on in that process where the justification for the award and the contribution to knowledge at a conceptual, critical and sufficiently creative level become clear. If these do not become clear early on, examiners report that they keep reading in the hope that such evidence will occur. They revise their tentative judgement if it does or doesn't occur. For some, the moment of realisation of the quality of the work appears when the literature review engages in a dialogue with the key work in the field, and the students' own work is clearly engaged in and has a voice in that dialogue, i.e. has mastered the theories and previous work, the arguments, and is aware that they have something important to say, to add, and indicate this. For some, it emerges where the data is being interpreted and it is clear what contribution is made to knowledge, to interpretation, re-interpretation or new conceptualisation. Examiners suggest that corrections on theses arise from the need for the work to be intellectually rigorous, well organised, coherent, publishable and well written, so that it not only makes a sound contribution to knowledge but does so in a readable manner, communicat-ing to others.

▶ Internal and external examiners

Much of this book, and this chapter in particular, considers master's and doctorate work. However, the roles of internal and external examiners in moderating, assessing and recognising or guaranteeing the quality of the student's work, and the internal rigour and reliability of the assessment system which helps produce that work and assign a mark to it, are similar at each stage of the student's career. The system for external examiners

working with undergraduate and master's research dissertations is similar to that for work with other undergraduate assessments – moderating internal marking, ensuring internal processes and procedures are fair and just, and ensuring standards are comparable internally and externally.

The role of the external examiner on a PhD, EdD or PrD is, however, more extensive. Examiners often act as one of a pair or more of first markers. There could be more than one external examiner working in a team with an internal examiner. In the USA there is a panel of internal examiners and no externals. The University of London, being federated, often shares 'externals' with different University of London colleges. In Australasia it is often considered to be important to have an external who is from another country than the university in which the student has studied.

The supervisor is the first to read through and deem the thesis presented by the student to be passable, but, after that, the supervisor's role in the assessment process ceases. The thesis has been produced in conjunction with the supervisor, so for the supervisor to be part of the final assessment would be oddly like marking some of our own work. But, of course, this is one of the tensions. In the event that the supervisor reluctantly lets the student go forward for the examination and the student does so without supervisor support, the supervisor could be criticised for the production of a substandard or problematic thesis. Supervisors are prone to scrutiny because we have supervised, led, agreed with and nurtured the student to produce the work. It is a professional issue of some difficulty if the results are failure or a mass of revisions.

A supervisor's work does not stop with submission. It continues beyond any viva or examination result through the revisions, and then onwards with the student's career (see Chapters 20 and 21).

It is a very good idea to gain some practice in the role of an internal or external examiner yourself. This helps to inform the supervising process, since you can then advise your student what to expect from the examination. As the role is notoriously underpaid, given the hours of patient reading, commenting and processing required, undertaking an external examinership is usually done for several reasons: a mix of altruism, subject interest and academic development. The first edition of this book (2005, Chapter 19) expands on the role and history of the external examiner.

Point (11) of the Silver report (Silver, 1995) urges that briefing and induction are essential: 'The adequate briefing and induction of external examiners by the institution should be a normal expectation and subject more than in the past to regular internal and external monitoring.'

In the early twenty-first century in the UK, the external examiner system again came under scrutiny and has been revised by the Quality Assurance

Agency in relation to the work of the Higher Education Academy. The main drive seems set to remain the same, although training, processes and consistency are to be enhanced so that the system becomes more robust.

For the PhD, EdD and PrD, the external examiner has a much closer relationship to the thesis and a clear role in terms of both the academic community and dialogue in the discipline. Examinations and vivas should be robust, collegial dialogues between academic equals with related specialisms who respect each other's research and publications and those of the supervisor, depending on aspects of the thesis to be examined. The examination and viva could be seen as presenting a protégé or new colleague to a broader (academic) community for acceptance following a rite of passage. However, such closeness *could* lead to an 'old boys' network of mutual confirmation, barely relating to the thesis itself or, worse still for the candidate, infighting and the settlement of old scores.

Selecting external examiners

The *Enquiry into the Role of the External Examiner* (Warren, Piper et al., 1989) found that examiners for undergraduate courses were frequently chosen through the formal and informal networks of subject leaders, heads of department and academics, then formally approached by those responsible for academic standards in the university. There are similarities in the ways external examiners are chosen for PhD, PrD and EdDs, but no body legislating nationally or internationally to ensure any parity in the process as yet, in either the UK or Australasia. Traditionally, ex-colonial countries such as Australia, South Africa, New Zealand and the Caribbean seek some external assessors from overseas (Australia, 50 per cent – see Kiley, 2003). Historically, this derives from their international origins, the gradual growth of research cultures and research capacity-building, and numbers of universities and colleagues established, experienced and practised in supervising then examining research degrees. Australia does not have vivas yet, and one reason for this could historically be the cost of flying international external examiners in, set against the difficulty of attracting a diverse and sufficiently large body of external examiners from among what was once quite a small number of universities. Locally, examiners tend to be chosen for a number of reasons. Some are chosen for their subject expertise, others for their expertise with the theoretical underpinning of the thesis (e.g. feminist research, Marxist-historical, or a particular version of therapy or methods). Not all will have PhDs themselves, necessarily, particularly if the student is working in a practice or commercially related area, or performance. A practising doctor of medicine, architect or artist might be an appropriate external examiner because of his or her background in theorised practice as an up-to-date

subject expert. Other externals could be chosen for their expertise in methodology or methods.

Choosing examiners for your own student's thesis is a politically sensitive matter. Questions have been raised about examiner quality, with reasons given for choice of examiners and their 'independence' (Hansford and Maxwell, 1993; Johnston, 1997; Tinkler and Jackson, 2000). Selecting or agreeing to the selection of someone whose conceptualisation of the subject area is at odds with those of yourself and your student could lead to unnecessarily damaging results, so it is important to ensure the examiner is in alignment with the *version* of the subject within which your student has been working, and the methodology or methods that the student has used. This is not the same as collusion, nepotism or dumbing down. It's about ensuring the right match between external, philosophy, epistemology and thesis. Whether examiners are involved in vivas or not, all produce reports. Research has concentrated on the kind and quality of reports, and on the viva. Advice from both research areas can feed into your work with your students, preparing them as they write up, and, if necessary, as they prepare for a viva.

It is important that all examiners are well briefed about what is expected from them. For colleagues who have not been through the PhD process, it is absolutely essential they have guidance about what to expect from a good, passable piece of research or thesis, and a standard against which to measure it. Rowena Murray warns us to beware of arrogance

> Does the potential examiner suffer from the 'drawbridge' mentality? This is a common disease. The examiner, having achieved a higher degree, believes that he or she should be the last person to enter the ivory tower before the drawbridge is raised, and unworthy unwashed multitudes lay siege to the castle. In practice, that means that all attempts by higher degree candidates to join the elite are repulsed as below standard. The second issue relates to broadmindedness or matching. The good examiner needs either to be a user of the same broad theory and methods of data collection and analysis as the candidate, and have an interest in the empirical subject matter, or to be broadminded enough to appreciate the merits of approaches other than his or her own. It is reasonable to expect students to have a reasoned defence of their theories, methods and topic choices, both in the thesis and orally in the viva. However, it is not reasonable to ask the student to defend a school of thought against blind prejudice, if the external examiner is implacable and irrationally hostile to a position, she or he will in all likelihood not prove a fair examiner. (Murray, 2001, p. 146)

Murray also comments on the importance of choosing the right external in relation to the student's future:

> It is important to have an external who is not just about to retire but will be active for a decade or so, so that he or she can write references, open opportunities and make recommendations for the candidate for years to come.   (Murray, 2001, p. 144)

More worryingly, Margaret Kiley explores examiner behaviour in 'You don't want a smart Alec' (2009). Some examiners are rogues. The importance of the role and their standing as external seems to go to their heads and they can behave arrogantly, dismissively and rudely. Some of this might be based on their personality (in which case you as supervisor need to find out more about them in person) and some on their disagreement with some element of the research, such as the methodology (in which case it is important to find out about their particular 'take' on the topic, the methodology, the field – to nurture discussion rather than collision).

In their very useful research and experience-informed book *Stepping Stones to Achieving Your Doctorate* (2008), Vernon Trafford and Shosh Leshem build on earlier work (2002b) to urge supervisors and students to start at the beginning of the research process by looking towards the end, asking what examiners seek in a sound thesis. In their work on the location and significance of questions in the doctoral viva (2002b) they found that examiners asked about the student's research design and scholarship, tending to ask more questions about content and structure when less sure of the significance of the scholarship. Examiners asked questions about the research question, conceptual framework and implications of the findings.

I have found using their identification of quadrants of focus, the areas in which examiners seek quality in a doctoral thesis, most useful in development sessions with supervisors of doctoral and master's students.

Examiner expectation and response quadrants

Quadrant A: technology of the thesis (structure, presentation of thesis: satisfaction of institutional requirements regarding word numbers, formatting, argument running throughout, coherent and sufficiently elegant expression)

Quadrant B: theoretical perspectives (identifying research paradigms, awareness of and use of literature in a dialogue, location in the know-

ledge construction in the discipline and field, theoretical perspectives, conceptual levels and conclusions)

Quadrant C: practice of research (emergence and use of research questions, topic and title, design, methodology and methods, data acquisition, analysis and interpretation – all show ability to 'undertake research in a critical and appropriate manner', Trafford and Leshem, 2008, p. 19)

Quadrant D: demonstrating doctorateness (establishes conceptual links between findings, synthesises evidence into claims and interprets into conceptual conclusions, scholarly advance of new knowledge and critique of established knowledge) (adapted and developed from Trafford and Leshem, 2008, p. 19)

Quadrants B and D are usefully theorised by our work on conceptual threshold crossing (2006; Wisker et al., 2010) identifying and 'nudging' the moments and stages of a student's work towards showing conceptual, critical and creative engagement and new knowledge, theory and insight.

Trafford and Leshem looked at viva questions relating to the quadrants. I think it is also useful to consider how these characteristics and achievements can be developed and evidenced in the thesis, and to use the quadrants as a way to guide student research and thesis writing. Finally, they can be used to help check quality and balance before submission and the viva. If you are intending to examine, you might also find them useful to inform your own considerations of elements of the thesis.

Activity – reflection

Please consider how and through what activities you would help students to (a) recognise these qualities as expressed in the quadrants, and (b) develop their thesis to exhibit these qualities.

Development suggestions which will help support development in all the quadrants appear in appropriate chapters in this book (Chapter 5 for B, for example).

A template of assessment criteria used by examiners may assist candidates in the design of research proposals and the presentation of their doctoral

theses. It can also provide a framework in which candidates and their super-visors can discuss research issues 'in which both have a common interest' (Delamont, Parry and Atkinson, 1998). Such a template should not be seen as a 'do-it-yourself' kit, but rather as a contribution to 'demystifying the doctoral process' (Burnham, 1994; Trafford and Leshem, 2002b, pp. 31–49).

Australian universities rely on written reports rather than vivas, seek international external examiners, typically assessing against a rating scale at one end of which is an unconditional pass, at the other a terminal fail. 'In between are several levels of suggested amendment ranging from minor amendments to a requirement to revise and resubmit the thesis for further examination' (Holbrook and Bourke, 2002, p. 1). Examiner reports are usually three and a half pages long in Australia. In the UK and elsewhere there are often draft reports produced prior to a viva and final reports according to a proforma of varied lengths:

> the production of this report has been shown to be the culmination of intensive and extended engagement with a thesis (Kiley and Mullins, 2002). After examining 51 examiner reports and noting the depth of much of the comment, Johnston (1997) was moved to ask, is the resource inten-siveness of this unique form of reporting necessary? Is it used? Equally pertinent questions are whether the assessments of a thesis are consistent and credible.   (Holbrook and Bourke, 2002, p. 8)

Supervisors and students might find it useful to pull together advice from Trafford and Leshem (2002b), Holbrook and Bourke (2002) and Winter et al.'s (2000) definitions of a good thesis in order to guide students in designing, beginning to write, rewriting and finalising a successful thesis that should pass the examination. However, research conducted by Holbrook and Bourke (2002), Trafford and Leshem (2002b) and Hartley and Jory (2000) indi-cated a series of issues to do with examiner quality, consistency and trans-parency of criteria, hidden examiner agendas, variation in areas covered and, in some cases, a tendency to focus on presentation to the detriment of the substantive dissertation or thesis, or on the contribution it makes to knowledge.

Research on examinations and examiners of PhD theses to date suggests opaqueness and huge diversity – hardly very helpful for the preparing candi-date:

> On the whole we know very little about what examiners expect and in what ways expectations affect the process of examination. There are tantalising glimpses that beg further investigation, such as findings by

Johnston (1997) and Pitkethly and Prosser (1995) that examiners treat the thesis as an end in itself. In addition, research indicates that examiners are inherently interested in examining a thesis and they approach the task in a positive light (Johnston, 1997, Kiley and Mullins, 2002; Tinkler and Jackson, 2001). Kiley and Mullins also noted a positive predisposition among experienced examiners to pass a thesis. However, a poorly written thesis generally had a negative effect on the examiner suggesting disengagement.   (Kiley and Mullins, 2002, cited in Holbrook, 2002, p. 3)

Part of the deviation is probably the fault of the institutions. Perhaps, to date, there has just been too little exchange of information about expectations across the sector, internationally, and each examiner or institution tends to reinvent criteria and practice.

Kiley and Mullins (2002) and Becher (1993) report examiner reluctance to fail a thesis. However, little is yet known about the relationship between what an examiner says and the criteria against which they are examining a thesis (Pitkethly and Prosser, 1995), and while some research indicates a similarity between Australia and international examiner comments, Kouptsov (1994) reveals international diversity.

Asked how they approach thesis examination (Kiley and Mullins, 2002), Australian examiners saw their role as important, particularly with respect to upholding standards – a position echoed in the findings of research undertaken by Tinkler and Jackson (2001). A small number of (non-replicable) Australian studies subjected PhD examiner reports to content analysis (Johnston, 1997; Nightingale, 1984; Pitkethly and Prosser, 1995). Reported shortcomings included limited disciplinary coverage, unexplicated analysis, and partial or narrow investigation of content (Holbrook and Bourke, 2002, pp. 3–4).

Hansford and Maxwell (1993) and Johnston (1997) draw attention to a possible lack of consistency in examination standards (i.e. between examiner ratings and comments on the same thesis) and between an examiner's rating and specific comments. They identified common types of comment and emphasis in examiner reports, including a disproportionate amount focusing on 'presentation'. Other studies have explored to what extent institutional guidelines or disciplinary standards documents determine the structure of comments, and how final results decided upon in a committee reflect examiner rating and/or comment (Kiley and Mullins, 2002; Tinkler and Jackson, 2000). Some researchers have explored how examiners differentiate between pass and fail theses, the threshold of an acceptable thesis, and outstanding theses (Kiley and Mullins, 2002; Winter, Griffiths and Green, 2000; Holbrook and Bourke, 2002, p. 4). Recent work exploring examiner

reports in a single UK institution (parallel project 2007–2011) discovered that examiner reports tend to spend much time detailing the examiner's progression through the thesis and what the thesis physically contains, while more useful critical, evaluative comments on contribution to knowledge, defence of methodology, and the elements that justify the award would be more appropriate.

Holbrook and Bourke (2002) asked specific questions about ratings between examiners marking the same theses; types of evaluative comment; differences between discipline, functions and the roles examiners projected through comments in their reports; and patterns of comments about students and theses between institutions, asking:

> What skills and knowledge have to be present for a candidate to pass outright, and how consistently are such criteria applied? How do examiners translate the concepts of 'originality, significance and contribution' into practice?   (Holbrook and Bourke, 2002, p. 6)

Examiners tend to engage with a thesis as part of that dialogue in the academic community in which students themselves are engaged. They often concentrate on that dialogue as it emerges in the literature review chapter, so 'Examiners identified "working understanding", "critical appraisal" of the body of literature, "connection of the literature to findings", and "disciplinary perspective" as key indicators of performance in the candidate's use of the literature' (Holbrook et al., 2006).

Evidence from Kiley and Mullins (2002) and Holbrook et al. (2005) indicates that very few candidates fail their PhDs at examination (as distinct from withdrawing – or having their candidature terminated – before a thesis is completed or submitted) and that examiners generally empathise with risks and problems associated with doctoral candidature and fully apprehend the profound consequences of failure. Evans et al. (2005) note 'the doctoral examination is a formative process rather than a summative event' followed by revisions. Johnston's (1997) research suggests examiners might take an editorial role, operating rather like a supervisor in providing formative feedback. Some examiners 'use' the reporting process to achieve more than merely assessing the thesis – instead they enter into a dialogue with the student's work, acting like a colleague or mentor, so they open a dialogue with more than one audience, adopting multiple roles, mediated by institutional frames and personal history (i.e. what the examiner expects to be able to find and change in the thesis by virtue of their rating and comments (Holbrook, 2002, p. 7). Evans et al. (2005) relate doctoral studies and research to risk and risk management, suggesting that

greater risks exist during the early days of the student's research rather than the actual examination process, since by then students are deemed eligible to pass, at least by the supervisor(s) who have agreed to their submission. (If they have agreed. Not all universities insist that students need supervisory approval to submit.) There is also the risk that findings may not be seen as significant and original by examiners. However, 'the risks are much greater during their candidature and it is here that the supervisor – and an increasing number of others – can be cast in the role of the risk manager and/or risk minimiser' (Evans et al., 2005, p. 7). In this context, the risk is shared, but we can argue that recognising this also recognises how very sensitive the supervisory relationship and supervisor mix can be, and so how potentially fraught with risk it is if a student loses his or her supervisor. 'Supervision panels, advisory teams, research mentors, and departmental candidature review committees now commonly share this risk' (p. 8). However, students might well see themselves as at the centre of the risk, since it is they who stand the risk of not passing the examination and viva.

▶ What decisions do examiners make about doctoral theses and why?

Kiley and Mullins (2002) indicated that examiners were very clear in their differentiation between poor, acceptable and outstanding theses and undertook the examination expecting students to pass. We could argue that this effect is because of the sense that supervisors have already 'passed' the thesis or dissertation (in most cases) by the time it reaches examiners. Johnston (1997) suggests the effort expended in writing the report is inconsistent with its use or importance. Tinkler and Jackson (2001) reiterate this in respect of the viva. What does a pass represent if an examiner writes a report seemingly contradicting it, or if the report contains requirements for a wealth of alterations? Some reports are clearly political:

> In their reports examiners are consciously 'positioning' themselves in relation to 'knowledge' – what it is to know, how they 'know', what it is important to know and why. It is to be anticipated that examiners, as members of a particular group, will share a familiar set of 'common sense' understandings about examination process and outcomes. Moreover, that such understandings (or at least the interpretative repertoire they draw on to express them) will be captured in what they say about examination and what they write in their reports.   (Holbrook and Bourke, 2002, p. 2)

Examiners react badly to a poorly written or presented thesis, which could overwhelm their judgement, blinding them to the quality of the argument and persuading them to spend their time suggesting a wealth of corrections to expression. This could be of particular concern to students for whom English is a second or third language. Kiley and Mullins (2002) also comment on the tendency of examiners to want to work with a thesis of great promise, not just passing it, but making suggestions for improvement prior to the award. So, the *good enough* thesis might pass with minimal amendments, while the potentially *excellent* one has more work to be done to make it excellent. This information is very important for students who are used to quite a different kind of more summative marking. Advice for significant improvement of an excellent thesis is formative, at odds with much assessment. Students need to realise that it represents a recognition of and support for the quality of their work.

Institutions tend to differ markedly in the guidelines they provide for examiners. On the basis of content analysis of reports, Johnston (1997) found examiners tended to follow university guidelines or recommendations about how to report on a thesis, whereas Kiley and Mullins (2002) reported the opposite on the basis of interview data. Most researchers in the field have discovered that editorial errors and presentation issues attract a substantial proportion of examiner comment. Hansford and Maxwell (1993), Holbrook and Bourke (2002, pp. 2–3); and Johnston (1997) note that examiners comment on changing labels, sentences and words and could have a whole section of a report on typographical errors, which Holbrook and Bourke (2002, p. 7) call negative 'fix-it' comments.

Recently, to my knowledge, a student with a perfectly sound argument and good supervision did not follow the final 'tidying up' suggestions of her supervisor. She was presented with a *book* of typos, comments to alter, etc, from the examiner who, disturbed by the presentational issues, found it impossible to see the quality of the work. The student was *not* happy. We need to ensure our students produce *perfectly* presented work so that this is not a hostage to fortune in the examination process. However, examiners also look for positive elements on which to comment and sometimes pick out specific parts of a thesis, such as the literature review or analysis, for comment.

Holbrook and Bourke (2002) found a variety of categories of evaluative comment, some of which relate to 'communicative inaccuracies' or 'significance and contribution'. Some are summative or judgemental. Others have an instructive focus: 'formative instruction', 'instructive commentary' and 'prescription' (Holbrook and Bourke, 2002, p. 8). Some examiners sum up their feelings holistically with 'this is a fine thesis'.

Examiners instruct candidates on improvement using instructions ranging from the philosophical to the presentational. Some are slippery and vague, some potentially useful, some generalised, some specific. Students need to consider the range of such responses as indications of what examiners seek in successful theses, deciding, before submission, how to ensure findings and existing literature are integrated, and the whole well expressed. After the examination they will need to view examiner response both holistically and at the level of particular comments suggesting improvements (see Chapter 22). Holbrook and Bourke (2002) warn us about vagueness in examiner reports, so supervisors will need to check out *exact* demands and help translate them so that students can act on them.

Most usefully, Holbrook and Bourke (2002) distinguish between 'formative instructional comment', where examiners are engaged with issues and embed suggestions about how to deal with developments, writing 'instructive commentary' that often tends to be non-contextual, rather general advice; and very specific requirements about substantive or presentational issues. Some advice is explicit, other advice needs interpretation. So, problematically, examiners might provide a kernel of potentially useful knowledge insufficiently extended for clear understanding, or a statement of such breathtaking scope that it cannot be interpreted other than that the thesis or elements of it should have been different. Such comments may include rhetorical or broad questions, and be wide-ranging (suggesting or showcasing the examiner's expertise). The examples below leave the reader grasping for direction and puzzling about implied action.

> the candidate did not integrate his findings into the existing literature, and did not provide much of his own analysis. Linking the findings into the literature situates them in their scholarly traditions, and demonstrates their wider applicability.   (Holbrook and Bourke, 2002, p. 10)

However, a specific, useful 'instructional comment' could look like this:

> Your arguments suggest fundamental differences in leadership behaviour between male and female managers. However, results from your interviews show some similarities at least in the sense of role and conflict … What are your views on the specific areas where their authority, responsibility or role conflicts do differ?

'Instructive commentary' could read 'the Candidate did not fully relate her findings into her (conflicting) arguments about leadership roles' – and a 'fix-it' comment, rather like a quick trip to the garage, would say 'p. 64 – just focus on the women managers or it's confusing'; 'leave out para 6 on p. 10'.

These suggest the thesis can be closed down quickly in order to get through – avoiding ongoing debate.

There are other comments relating the student's work to that of the examiner and the research group, engaging students in a research community.

Considering academic community and negotiating with the candidate's construction of knowledge and perception of the world, Terry Lovat uses Habermas's theories to explore the critical or self-reflective kind of comments that are actually quite rare.

> When dealing with knowing of the critical/self-reflective type, the traditional roles of teacher/supervisor/examiner and learner are potentially reversed, with the learner being acknowledged as the one who is in control of their own knowing, and the role of the former being as listener. If the listener wishes to know what the learner has learned, and even more so if the listener wants to 'know' what the learner now knows, then she/he will be dependent upon the learner sharing what is known. (Lovat, 2002, p. 4)

The knowing of the learner could go beyond that of the teacher or examiner. This resembles true collegial exchange.

Education is seen as ethical, related to justice and self-actualisation – something you might expect to find in the PhD thesis. But Lovat found this surprisingly rare:

> There was only one report that offered a text that I found convincingly expressed something of the self-reflective dimension … . The difference in tone from the norm would likely catch the eye of even the casual reader. This report began: 'There are those pleasant occasions when one is asked to review a paper or examine a thesis and you wish that you had written it. I believe that this is one of those experiences.   (Lovat, 2002, p. 6)

Few reports recognise self-actualisation and contribution to knowledge offered by a thesis. Lovat suggests examiners need *training* in giving the kind of feedback that *does* represent collegiality and appraisal rather than issues of typos, vague phatic suggestions, or 'fix-it' solutions.

In later work, Lovat et al. (2008) use Habermasian theory to explore the ways in which examiners focus on certain characteristics, and their negative comments on even the top 5 per cent of theses might imply a kind of normalising, what we might call a neutralising of the more experimental elements of a doctoral thesis, which in itself would restrict originality and so the main aim of a piece of doctoral work.

Lovat notes that:

> it is suggested that such text may constitute what might be described as an 'examination genre' and that, granted the stated intentions of the PhD to be 'original', 'creative', 'contributing to new knowledge', etc., such a genre could serve unwittingly to discourage the kind of risk-taking and innovation that would normally be attached to such a venture. Just as the genre might serve ultimately to discourage candidates as they become aware of the examination regime implied by the genre, so too might supervisors focus overly in their own work with the candidate on the technical features germane to empirical/analytic knowing, rather than encourage overly the historical/hermeneutic or critical/self-reflective potential of a thesis. In other words, knowing that a fairly technical and negative genre is likely to dominate the examination process may well encourage supervisors to play safe in the mentoring of the thesis, rather than risk too much of the kind of boldness normally found as an attachment to true stretching of the boundaries of knowledge.   (Lovat et al., 2008)

Lovat et al. also discovered that some examiners respond constrictively as if they were supervisors: 'the examiner is seen to draw explicitly on the role of the supervisor, and that this text was wrapped in more positive and encouraging language implied a different positioning and invited a modicum of partnership in the business of assessing the value' (2008, p. 74).

This leads us to consider not merely how to prepare our students, but how to act as examiners ourselves, and to ensure in our own systems that examiners are encouraged to move beyond the level of local, specific comment to engagement with the ways research and a thesis contribute new knowledge.

▶ Being an examiner for a viva

External examiners are expected to read the work thoroughly for a report and in advance of a viva, advised by the university's guidelines in their response. In some instances, they produce a draft report on the thesis, shared with another external examiner (if there is one) and the internal examiner, so there are issues which the team can take up on the day, approved in advance. However, some institutions keep the draft report confidential so the examiners have not shared their responses. Discussion about the quality of the thesis is decided at the meeting preceding, and then following any viva.

On the day of the viva, examiners usually meet to discuss differing responses to the thesis. This is a relatively informal discussion, most usually between the examiners themselves, excluding the chair, although some institutions involve all three. The supervisor is rarely, if ever, involved, as he or she might pass clues about questions to the candidate. However, in some institutions, there could be only one external examiner who might discuss with the supervisor, enabling them to brief the candidate. Before you set up your examination, you need to be absolutely certain what the procedures are. The internal chair is tasked with ensuring that everyone decides on the order and kind of questions to be asked; that no one acts unfairly; and that meetings are conducted in accordance with university policy. Outcomes need reporting back with agreement from all concerned. Usually, the chair and externals/internal decide who will ask which kinds of questions. Subject specialists will probably ask subject-related questions, and methodology or methods specialists ask questions related to methodology. Questions related to conceptual frameworks, reasons for choosing the topic, why the research matters, and what kind of conceptual conclusions have been discovered might be the province of one examiner or shared between them.

Questions resemble areas discussed in mock vivas, with the addition of subject-related questions. There will probably also be questions about the perspective taken on the subject; the use of specific texts, theories, and any theorists; and what is considered important reading. In some vivas, examiners probe candidates about specific areas of their data and its analysis, asking questions about how and why it was collected, analysed, categorised, theorised, and how and why certain conclusions have been drawn. This could be a catch question about a particularly problematic area of the work, or merely a drilling down into one section to test the candidate's specialised ownership of and closely informed knowledge about their work. It can feel like a grilling to a student but it could just be a discussion amongst collegial equals based on the excitement and fascination of the examiners, who really want to find out what the candidate has discovered and how he or she can argue the case, back up claims with theory and evidence and be convincing.

Trafford and Leshem (2002b) and Holbrook and Bourke (2002) found examiners asked a variety of questions, with the addition of some social warm-up or relaxation questions about the candidate's journey, the weather, and some other more general but subject-related collegial questions about issues of interest, conferences, or reading in the field.

If this is a developmental activity to recognise work by a collegial equal, rather than a final summative test for pass or fail, why are examiners not involved in discussions with supervisors who relay questions to candidates, readying them for vivas and future work?

▶ **Examinations and vivas**

The aim is not to fail the candidate. It is not an interview for which there are several others in competition for a job, and it is not meant to be 'the Inquisition'. It is not an opportunity to settle old scores with supervisors or the institution at the expense of the candidate, or to deliver a presentation on your own work in the field, arguing heatedly about the conceptualisation or construction of the subject. This latter is more appropriately something you might do in a seminar, conference or conversation with colleagues. The former, the settling of scores, can be done in private. The thesis has been presented because it is considered of passable quality, and the viva is there to examine it and to question and problematise elements of the thesis. The viva is to make absolutely clear the candidate's sense of the importance of the contribution, and why the candidate conducted the research in this way, using this conceptual framework, these theorists, and these methodologies and methods. It is also to determine that the candidate understands the significance of the results and findings, is fascinated by the work and has ownership of it, not just in terms of 'not cheating', but of understanding why and how the candidate asked what was asked, what was found, and why it is expressed the way it is in that shape and order in the thesis. This is a defence, but among colleagues. Collegial discussing and colleague friendli-ness are part of expected behaviours.

Questioning

All the characteristics of good questioning practice apply to vivas. Questions should be clearly phrased and not leading. Several questions should not be asked simultaneously. Instead, they should be divided up and staged so that they build on each other rather than pulling several threads together into one question.

Do not run questions about choices, structure, findings and commitment all together – that is – separate out meta-questions, questions about the justi-fication or contribution of the research, and on details about content or expression. These are all important areas, but conflated they can confuse the candidate. It is up to examiners to be at least as clear in questions as they expect the candidates to be in their answers. If the candidate becomes upset or confused, the examiners need to ask themselves whether they have asked questions in a clear manner or have confounded several areas together. Body language is also very important, as in any interaction. If the candidate seems to dry up or become confused, the examiner needs to ask whether his or her body language is sceptical, hostile, bored, unfocused or misleading in some way. There is nothing to be gained by negative body language; it only

switches people off, and this is inappropriate when a positive developmental discussion is needed. Candidates who appear confident can be reduced to relative incoherence by body language or verbal responses which suggest that the thesis is not considered worthy of the discussion and the examiner's time. If a candidate does seem to be confused, go back to separating out the questions and asking them one by one, building them up as the responses emerge. While the viva is certainly an opportunity for defence and articulation of arguments on the part of the candidate, it is not a hostile verbal sparring match in public, and it is not meant to be an opportunity to belittle someone. If a candidate appears a little confused, rephrase the question and pause until the answer becomes clearer, and if he or she really does not seem to know what has been written or talked about, probe further without being hostile. The candidate could be too nervous to be totally in control of the material and a gentle building up of questions could calm the candidate down and free up his or her articulacy. Candidates who have had appropriate opportunities to take part in mock vivas might, we hope, be less likely to freeze, gabble, become incoherent or silent (all interview experiences), but it could also be that, like the written examination candidate, they over rehearse and so become worried if they hear questions they have not thought of in advance or whose wording is challenging. If they seem to need a few moments to look through the thesis or collect their thoughts, this is appropriate. You might well find after they have gathered themselves together that an explanation you feel was missing in the thesis can be discovered. This would then make you more confident about their ownership of a piece of work which makes a sound contribution to knowledge at the doctoral level.

Different forms of vivas in international contexts

In Canada and North America, generally there is a viva which takes place before the candidate is allowed to undertake PhD research and which is based on the candidate's work to date and the proposal's quality. In many UK universities, development stages have the same intention. During formal progress sessions students defend their proposal, answer questions about the way in which they will conduct their research and outline and defend any early work done towards the PhD. This is part of a progress checking activity to finalise the proposal and will result in work to be done and certain questions asked and answered, so that the research is itself more rigorous and robust as a result of the discussion with academic experts other than the supervisor(s). In much of Europe and Scandinavia there is an early viva which takes place in the department with internal experts and possibly the full research group, or at least some other doctoral candidates and supervisors.

This provides a collegial atmosphere and also offers the opportunity for students and supervisors to see several vivas in action before the viva for the next students. This is not the final viva; however, if the student passes this the student is often considered to have passed the PhD, and then there is a more formal doctoral viva conducted in public, on a stage. The external examiner is referred to as the 'opponent' and the viva can last up to a whole day. Those invited include family and friends, as well as members of the university and guests. The doctoral candidate is questioned in his or her work by the external. Colleagues in Sweden have suggested that this is sometimes quite gruelling, so that while everyone else is off celebrating the candidate's success, he or she is still on the stage being grilled by an exter-nal, in public. Supporting your student to develop skills of public speaking, and the ability to maintain a high-level discussion over time in public in front of an audience, is a skill needed in these cases, and it makes the viva experi-ence quite different from the UK viva and very different again from the Australian context, where there is no viva.

Research is being conducted at the University of Newcastle, NSW, with support from colleagues at the University of Brighton, in the first instance, to explore any differences in examiner reports to which the existence of a viva might contribute. Students I interviewed in an Australian university (parallel project 2005–2011) indicated that they would welcome the opportunity to develop their arguments in public in a viva discussion.

▶ Supervisor learning from examining doctoral theses

Being part of a PhD examination is a very useful form of professional learn-ing for supervisors, not least because what we learn can be used to help prepare our own students for their thesis completion and their vivas. Recent research into what supervisors learn from being examiners has helped explore how supervisors can advise students about what to expect in their doctoral examination and viva. In 2010–2011 we (Wisker and Kiley 2011) explored examiner processes and practices, and whether it was possible to identify from thesis examiners' comments how they recognised and commented on doctoral-level achievement. We also sought to identify how the examiners discussed theses that were considered marginal. We asked how and what examiners, supervisors and postgraduate students could learn from this information and these research-informed insights about examiners' processes and practices, to inform their work. One of our interviewees extended our understanding of the quality of a thesis by suggesting that it is not just the compliant, safe thesis which excites them, but instead the one

which offers a really important, new contribution to knowledge and which excites them when they read it. This runs counter to the more standardised response discovered by Lovat (2002) in a larger piece of work in Australia. Our respondent said:

> It's not illuminating, I want to see lights come on in what the person is saying and what they've achieved, if it's flat … . If it's pedestrian and flat you know they can tick the boxes, they have done this, they have done this, and they have done that, then that's the straightforward thesis work but something that's moving on from that, the exception is where I see illuminated thinking coming through in the sections.   (Examiner interview)

The examiners we interviewed reported on their examining processes and specific examples of stages in the thesis and viva when students are clearly evidencing work of doctoral quality, have ownership of their project, are articulate and confident about its achievements and discuss its workings and effectiveness in a collegial manner. Interestingly, a new discovery was that examiners talk about going through 'conceptual thresholds' (Kiley and Wisker, 2009, 2010) in their recognition of the quality of the work.

From the analysis of our research into what examiners recognise as a quality thesis, we argue that a marginal doctoral thesis will be characterised by 'patchy' work that indicates the researcher/writer is still in a developmental process. In contrast, examiners recognise as more than merely marginal the candidate who presents work that is conceptually coherent and intellectually rigorous, and which indicates they have crossed various conceptual thresholds in their learning. Examiners suggest that such candidates show in their work, both written and in the viva, that they have undergone both an ontological shift that has changed them as a researcher, and an epistemological shift evident in the articulated quality of their work and their contribution to knowledge. Examiners were clear about marginality, quality processes and the issue of originality and risk.

Some examiners in our work report that they transfer learning from the examination process to their own supervision practices (Wisker and Kiley, 2011). Examiners who are supervisors talk about recognisable qualities of a passable or a marginal thesis and the transfer of their experience into advice and clarification of criteria for their students. They also comment on examiner behaviour.

We might learn as supervisors from being an examiner, and so might be better able to advise candidates about how to exhibit their intellectual achievement, identity and personal development and engagement, awareness of and

ways of engaging with the regulations and expectations of the size, shape and contribution of research and of a thesis, and their specific behaviours in the viva. Other learning from being an examiner is about the expectations of the examiner's engagement, in addition to learning about the response to work of the student, and this learning can be used to alert students not just to what the examiner seeks in their work and presentation of it in a thesis and a viva, but how an examiner might behave in the process.

In discussion about the early results of our research with other supervisors at the University of Brighton, I began a grid which I have further developed and which aims to define the different areas of examiner-as-supervisor learning, which can inform support and guidance of students, as well as informing general institutional learning about the examining principles, processes and practices and examiner behaviours.

What do we learn about what examiners are looking for? And about how examiners behave? His model is based on analysis of examiner responses and on discussions in supervisor workshops. It could be useful to indicate areas which students and their work present, and which examiners notice informally and in some instances assess formally. It also provides some thoughts about examiner behaviour.

Intellectual	Emotional/Personal
Tactical/Institutional	Examiner Behaviour

FIGURE 19.1 EXAMINER-AS-SUPERVISOR LEARNING: KNOWLEDGE ABOUT AND FOR EXAMINERS

Intellectual: Examiner responses indicate awareness of the elements of a quality thesis based on quality research. They include comments on the intellectual rigour, cohesion, argument and contribution to knowledge, the overall justification of the award which the student's thesis offers both in written form and in the viva. Examiners expect quality, significance of research findings, the robustness of the research process, and a kind of confident (not over-confident) expression of a right to join the collegial body of postdoctorates.

Emotional/Personal: Some aspects of doctoral learning are ontological, personal and emotional, of which some are focused on ways of managing difficulties, i.e. about managing stress, time, engaging with a positive attitude and developing a postdoctoral identity, while others emphasise assuredness based on evidence of quality, the confidence which results from being assured of the quality of the work and the vitality of the findings. Examiners see evidence of this in the confidence, clarity and logic of students' expression, both written and in the viva.

Tactical/Institutional: Some of the learning points are tactical, for example, from examiner responses we find two kinds of institutional and tactical information. Examiners seek indications that students are working within the bounds of institutional regulations. They expect that work will exhibit appropriate presentation quality and conformity to institutional requirements. They also talk of the need for their own adherence to those regulations, such as the completion of reports.

Examiner behaviour: Examiner behaviour information is recognised by Kiley (2009), Trafford and Leshem (2008) and Wisker and Kiley (2012), but often remains a professional secret. Information gained about examiners emerges from their comments about their beliefs and behaviours, and from comments made by others involved in the examining process who have observed or read the examiner responses and behaviours. This information contributes to institutional and professional knowledge about examiner behaviour. It includes alerts to the behaviours of potential rogue examiners, those with trick questions, negative body language, and insistence on different interpretations and approaches despite the appropriateness of the choices made (however these might differ from those the examiner might make).

How and what can examiners, supervisors and postgraduate students learn from this information about examiners' processes and practices in order to inform their work? It might be a good idea to share experience

from examinations and vivas with other supervisors, as well as with students (maintaining confidentiality), so that the examination and viva seem less of a lottery, either utterly terrifying or underestimated in terms of what is needed, as well as offering infomation on how to react, and what is deemed of sufficient quality.

▶ **Further reading**

Evans, T., Lawson, A., McWilliam, E., and Taylor, P. (2005) 'Understanding the Management of Doctoral Studies in Australia as Risk Management', *Studies in Rese*arch, 1, 1–11.

Hartley, J. and Jory, S. (2000) 'Lifting the Veil on the Viva: The Experiences of PhD Candidates in the UK', *Psychology Teaching Review*, 9, 76–90.

Lovat, T. (2002) *What is This Thing Called RE: A Decade On*?, 2nd edn (Sydney: Social Science Press), pp. 4, 6.

Lovat, T., Holbrook, A., and Bourke, S. (2008) 'Ways of Knowing in Doctoral Examination: How Well Is the Doctoral Regime?' *Educational Research Review*, 3(1), 66–76.

Tinkler, P. and Jackson, C. (2001) 'Back to Basics: A Consideration of the Purposes of the PhD Viva', *Assessment and Evaluation in Higher Education*, 26(4), 355–66.

Wisker, G., Morris, C., Cheng, M., Masika, R., Warnes, M., Lilly, J., Trafford, V. and Robinson, G. (2010) 'Doctoral Learning Journeys – final report of the NTFS-funded project'.

Wisker, G., Kiley M (2012) 'Professional Learning: How Supervisors Learn from Examining', *International Journal for Academic Development*.

20   Supporting students towards a successful PhD viva

This chapter considers:

- *how to support students working towards a successful viva*
- *mock viva preparation*
- *the actual viva and what is expected*
- *managing stress*
- *research into preparing for the viva*

The viva is an oral defence of a student's work. While, for undergraduate, and sometimes for master's work, it could be used to explore the quality of work which is borderline, at PhD it aims to engage students in a defence of their work, and a dialogue about it with experts, so it is both an oral examination and an opportunity to enter into dialogue in the research community, both a testing moment and a chance to explore, clarify, discuss and defend. Not every country has a PhD viva, but the UK, New Zealand and those with European-based PhD systems expect postgraduate students to undertake a viva – a defence of their written thesis. In the North American model, it is rather an initial defence of the proposal, to test its readiness for the full research process. Unlike the kind of viva that is conducted with students whose work might be borderline, the PhD viva itself is neither a test of cheating or plagiarism, nor an activity conducted to see which side of a grade border a student's work lies. Instead, it aims to evaluate and assess to what extent the doctoral candidate has full ownership of his or her written thesis. It aims to engage students in a defence of the arguments and cohesion of their research as expressed in the thesis, and to engage them in a dialogue about ways in which *their* work engages in a dialogue with experts in the field. As such, then, it is interestingly both an examination and a collegial discussion. The further it moves towards the latter, and the earlier it gets to

this stage and remains there, the better the likelihood for the candidate that there will be no or few corrections to make to their thesis. However, only 12 per cent of UK PhD candidates succeed in achieving their doctorates without any revisions following the viva. In other words, 12 per cent actually succeed in getting through the viva completely successfully, first time with nothing to do to their written work. The viva is a defence of the written thesis, and it is the thesis that is being examined. So, a good thesis should not be adversely affected by a bad viva. However, performance in the viva either confirms the quality of the written work or indicates that there are confusions, ideas and decisions which, because they cannot be clarified orally, need to be further explained and expressed in writing. Not every PhD candidate knows this, and some are still surprisingly naïve and unprepared for the rigour of the viva, assuming that their work will stand alone, speak for them, and that the viva is a mere formality.

Building on work by Hartley and Fox (2003) and Winter, Griffiths and Green (2000), Trafford and Leshem (2002b) base their findings on attending 25 doctoral vivas. Questions asked by examiners were collected and textually analysed, identifying clusters of themes which can be used as templates or stepping stones to help prospective researchers defend a doctoral thesis. Their findings are helpful for doctoral candidates, not least because they identify the typical range of questions and the commentary found in vivas. Australian universities rarely use vivas, instead relying on the written thesis alone. However, research being conducted at the University of Newcastle, New South Wales, by Allyson Holbrook, Sid Bourke and others, with some input from the University of Brighton-based part of the NTFS-funded Doctoral Learning Journeys (DLJ) research team, is exploring examiner responses where comments are made in reports about the additionality of the viva. In our interviews with examiners for the DLJ and the parallel project (2007–2010) we found that examiners who used vivas made a number of interesting comments about ways in which students were able to enliven and illuminate their written thesis in discussion in the viva. In some instances, through the viva discussion and responses to probing questions, candidates have shown that they understand the significance of their work, can explain how it makes a new contribution to knowledge, and really engage at a conceptual level with their data to develop a convincing argument, while the actual written thesis is more prosaic. Their defence convinces the examiners of the quality of their thinking, and of their research and understanding of the important contribution of that research.

In some instances, examiners then ask the candidate to return to the written thesis and ensure that quality of response is included, so their corrections raise the conceptual and critical level of their written thesis. We would

argue that the candidate shows they have crossed conceptual thresholds with this exploration and articulation, and that such articulation needs to be there for future readers. That such significant moments of learning leaps and articulation can take place in a viva, and be taken back into the written work later in corrections, helps make an interesting case for the added dimension that a viva enables (or alternatively it could be argued that this level of work must be there in the original written thesis for the work to pass) (Wisker et al., 2010, 2011).

There are very definite, clear oral skills that students need to develop in order to present their ideas and the coherence and value of their research in the viva, in the best possible light. This discussion will draw on research into oral skills, and their assessment (Hartley and Wisker, 2004), into the quality of a successful PhD, and PhD examinations, of which the viva is a special case, exploring particular ongoing research and development work with which I and colleagues have been involved since 1997, working with our cohorts of PhD students.

The third stage of the research development and support programme for PhD students, with which I was involved from 1997, focuses on the production of a thesis of a quality that is sound evidence of good research, and on the successful defence of this thesis and research in the viva. To this end, we conduct viva training and mock vivas, as well as supervisory dialogues encouraging students to develop the kind of clarity, coherence and skills of exploration and defence needed in the PhD viva. Some experiences of mock vivas inform discussion and suggestions in this chapter, as does experience of being the supervisor or the examiner in several PhD vivas.

Ongoing work producing a CD-ROM to support students in preparing for the viva feeds into some suggested activities (Hartley and Wisker, 2004, 2011).

▶ Research into the viva and suggestions

Little has been published on the problems and experiences of vivas, either real or mock. Most of the literature on undertaking the viva is anecdotal (Denicolo et al., 2000; Morley, Leonard and David, 2002). Other work is in the form of advice to students (Leonard, 2001; Murray, 2003; Tinkler and Jackson, 2002). Data-based studies are beginning to emerge (Delamont and Egglestone, 1983; Hartley and Jory, 2000; Jackson and Tinkler, 2001; Tinkler and Jackson, 2000; Trafford and Leshem, 2002b). There is scant advice on the mock viva (e.g. Delamont et al., 1997; Murray, 2003; Tinkler and Jackson, 2000) except for recent work by Hartley and Fox (2003).

Hartley and Jory (2000) have produced one of the few studies on the viva that in some countries, particularly in Scandinavia, is a public defence, and in the UK tends to be privately conducted. Their work largely depends upon a questionnaire based (in its pilot phase) on responses received in semi-structured interviews with five academics and one recent postgraduate at the University of Keele. Subsequently (in January 1997), an email was sent to 100 heads of psychology departments in the UK, identifying a sample of those who had recently undertaken vivas. A questionnaire was followed by letters to non-respondents, achieving a total of 100 replies: a 75 per cent response rate. Respondents were 60 women, 40 men; 71 full-time, and 29 part-time. Most had experienced positive viva outcomes.

This study suggests that greater preparation with mock vivas should help candidates, and that examiners need training to standardise the experience of the viva more thoroughly, so resolving unfairness, and making it more straightforward to prepare for the viva. Indeed, if the aim of the viva is to clarify and defend the thesis rather than trip anyone up, both these suggestions make clear sense. However, there is still no formal professional training or development for PhD examiners to match that of the development for supervisors (one example, however, is Sankaran et al., 2005, who develop a community of practice among examiners using storytelling). More worryingly are reports on examiner behaviour in the viva, where a certain vying for hierarchical position can undercut the focus on fairness for the candidate.

> although the differences in power may be explicit between the student and the examiners, there is often a not so subtle power relationship between the examiners, where less senior/experienced/powerful examiners may be 'encouraged' to align their views to those of the examiner with stronger ideas, more stubborn views or entrenched ideologies. The pre-viva meeting can be an interesting contest in which examiners can seemingly examine each other.   (Carter and Whittaker, 2009, p. 176)

Lovat et al. (2008, p. 74) comment in their analysis of reports from inexperienced examiners within the Australian system that 'the process of doctoral examination can be as much an examination of the supervisor's expertise as of the ability of the candidate and the quality of the thesis'. If you act as an examiner as well as a supervisor, it is to be hoped that reading about the examination in Chapter 19 and the viva in this chapter can help inform your own practice as an examiner, as it should also help inform your practice as a supervisor supporting and developing students towards the examination and viva.

▶ **Mock vivas**

Hartley and Fox (2003) argue that mock vivas are much more complex than many postgraduates and supervisors think. Tinkler and Jackson (2002) usefully distinguish between five kinds of formal arrangements for mock vivas, providing examples and discussing advantages and disadvantages:

1   where the student takes part in a 'practice run' organised by the supervisor(s);
2   where the students take part in giving each other mock vivas as part of a training course;
3   where students observe staff members simulating a real viva as part of a training course;
4   where the student undergoes a viva as part of the procedure for upgrading from a master's to a doctorate;
5   where the student observes an actual doctoral viva taking place.

Two other kinds of mock vivas are:

6   where the students read a 'mock thesis' and suggest questions for a subsequent viva role-play;
7   where students observe a video of a real or simulated viva as part of a training course.
         (adapted from Tinkler and Jackson, in Hartley and Fox, 2003, pp. 2–3)

Only 23 of the 100 psychology PhD students studied by Hartley and Jory (2000) had experienced any kind of mock viva (Hartley and Fox, 2003, pp. 2–3).

Hartley and Fox (2003) talked initially with three PhD students about the differences between the mock and real viva. They then sent out questionnaires, of which 31 were returned. Three respondents described mock vivas used as part of an upgrading exercise, up to a year before the real viva, noting that advice was often vague.

> questions were designed to see if experiencing a mock viva would reduce any anxieties that the students might hold … the majority of the candidates were apprehensive to some degree and the women full-time respondents felt more anxious than did the men before their mock vivas.
> (Hartley and Fox, 2003, p. 11)

Another issue they examined was whether, following quite a rigorous mock viva, the viva itself was a 'let down', since earlier studies indicated such disappointment for 20 per cent of students (Hartley and Jory, 2000; Jackson and Tinkler, 2001). They discovered that approximately 30 per cent of students did feel let down to some extent after the real viva:

> Yes, this was a real problem. I expected to be beaten up and was seriously nonplussed when I realised that I didn't need to fight every point. I felt I hadn't quite earned the award.   (Hartley and Fox, 2003, p. 10)

But two respondents reported that these kinds of feelings had nothing to do with the mock viva. Either the real viva was 'a nightmare' or it was 'a lot easier'. Several suggestions arise from Hartley and Fox's research:

> if mock vivas are to be held, they need to be treated seriously, and that common ground rules need to be established, at least within departments. It would seem sensible to try to arrange mock vivas at a specified time before the real one for all candidates. It would be realistic for the student if there were at least two examiners, and the viva to run for at least one hour. It would be helpful if all candidates were given advice on preparation for both the mock and the real viva, and were given feedback on their performance in the mock viva.   (Hartley and Fox, 2003, p. 12)

Students themselves will probably benefit from undertaking mock vivas and also finding out more about typical questions and behaviours in the real viva. Trafford and Leshem (2002b) and Murray (2003) provide such insights.

> It is possible that if students are made more aware of the nature of the real viva via their experiences with the mock one, then some of the feelings of disappointment with the real viva may be reduced. These feelings seem to result from (i) the examination being insufficiently searching, (ii) the negative behaviour of some examiners, and (iii) the fact that what has been built up for some time as a huge 'life-event' is now over.   (Hartley and Fox, 2003, pp. 15–16)

▶ **Preparing for the viva**

The Institute of Education, London University, contains academic advice on its website, aimed at students. This is reproduced in the box.

How to prepare for a viva

You should prepare for the oral examination (the viva voce). There are many ways to prepare and there will be different views expressed on how you should do so. Here are some possible ways:

- if possible practise presenting and discussing your work at conferences, and dealing with questions;
- find colleagues/staff who are willing to read parts of the thesis and then ask you questions;
- Phillips and Pugh suggest that you make a systematic summary of your thesis so that you know the contents of every page;
- talk to colleagues who have gone through their oral examination successfully and ask for their advice;
- make sure that you have read through your thesis and are thoroughly familiar with it, particularly the whole argument, the main findings and the major contribution of your work;
- one suggestion is to write a book proposal based on your thesis, thus requiring you to present your work and to justify to a prospective publisher why it should be published, what is original, what are the competitors in the market;
- read any new relevant material as it is published.

www.ioe.ac.uk/doctoralschool/info-viva.htm)

It is important, as postgraduate students prepare for the viva, that they know their thesis well and have had some experience in explaining, exploring and defending it. Offer students these few tips on being prepared for the viva:

- know the thesis very well in order to defend it;
- develop a brief outline of the main argument, conceptual conclusions, key points you would like to make, responses to common questions;
- know the abstract and conclusions well;
- find out about your examiners;
- rehearse with friends and supervisor;
- manage stress before and during the viva.

Students need to prepare to explain the conceptual framework, and how it underpins and drives everything in the research. Generally, they will be

expected to be clear about the main issues, and answer questions about interesting or strange problems. They need to be ready to defend and define the importance of factual and conceptual findings, why the research matters and what it contributes to knowledge and understanding in the subject.

Students should prepare some very brief notes handy for the viva (if they write answers to the postgraduate viva CD questions below, they could use these at this stage as tips) and so as to be sure to know where answers could be found in the thesis:

- make reference points in notes/answers
- place post-its in the thesis where questions could arise or where specific points should be made.

Some practice in using the metalanguage of viva defence is very useful. It is not every day that someone asks about gaps in knowledge (what did this research set out to explore/address?); boundaries (why did the student choose these issues, this methodology and methods and not all the other related issues, larger sample, different methods?); what is the conceptual framework?; what are the theoretical perspectives?; why these theories and theorists?; why not others?; what are the main factual and conceptual conclusions?; and what makes this a doctorate? Yet such questions about the research conceptualisation and the shape, contribution and importance of the research are common in vivas.

Suggestions about stress and time management should help your student. Wisker (2001) suggests managing stress in a number of ways, including confidence in the thesis, ensuring the student is well rested, fed, relaxed, wearing loose clothes, on time, manages their breathing, controls stress immediately beforehand, prepares adequately and has post-its in key points in readiness for reference (Wisker, 2007, pp. 301–2).

Vivas usually:

- take about $1\frac{1}{2}$ to 2 hours (in some European and Scandinavian countries up to 6 hours)
- include one or two externals and an internal, a chair from the university. Supervisors can be invited but are expected to be *silent and passive.* In some parts of Europe and Scandinavia vivas are conducted with large audiences, and held on a stage.
- candidates who *require* and *request* it can have a translator present.

The aim of the viva is:

- to explore and defend the thesis and the research of which it is a record.

Examiners want to discover the student's ability to clarify and defend his or her research and contribution to knowledge in the field. They ask two main kinds of questions: *generic* questions about how students go about their research, methods, questions, processes and the justification for the award – the quality of the contribution to knowledge – and also *specific* questions considering local arguments and issues in the text. In so doing, they could refer to particular pages and sections. They are likely to ask questions about:

- reasons for undertaking the research
- context of research
- choice of question/topic/hypothesis
- gaps and boundaries
- conceptual framework
- theories and theorists
- methodology and methods
- sampling
- handling and analysing data
- problems and surprises
- conclusions, both factual and conceptual
- contribution to knowledge
- why this is a doctorate
- further work.

They seek passion, excitement, enthusiasm, intellectual rigour, sound organisation, clear expression and ownership. They also sometimes want to insist on additional or different theories underpinning the work, and on different interpretations of data and findings, on further clarification of the link between evidence and claims, and of the ways in which an argument is sustained and backed up by the data.

▶ During the viva

Your student might find these ideas and tips useful:

- Sit down and place the thesis at hand but don't open it. Feel secure about it being there.
- Thank the examiners for the opportunity to talk with them about your work. These people are key figures in your field/methods and they have spent time on your work.

- Answer questions clearly and concisely throughout, but ask them to clarify questions you are unsure of – buying time.
- Use the arguments, ideas and examples from your thesis in answering the questions. You will need to feel secure with them (so rehearse beforehand).
- Back up your cohesive and coherent piece of research by making it clear how the conceptual framework links questions, themes, methodology, methods, fieldwork, findings and conclusions.
- Be able to refer to key texts you have used and agree or disagree with, and explain your position (reference the authors and dates, etc.).
- Use eye contact throughout – appear confident and positive.
- Do not fumble through your thesis – use book markers or post-its to allow you easy access to pages you feel might be useful (but not all pages). Mark key chapters, problem points and any original points you would like to discuss.
- If the examiners do not seem to mention what you think are key issues, new findings or important contributions, mention them and ask what they think about these issues. Engage them in conversation. If you finish the viva and they have not asked about your key points, introduce them unless you feel it would upset the viva.
- If they point out problems, think on the spot and let them know if you do not know/agree/disagree or indicate that these issues can lead to further work beyond the scope of this thesis.
- Don't try to answer questions that you don't understand. Ask them to clarify them (and use the time to think).
- Don't introduce new information and new ideas that are not in the thesis (this could lead to suggestions that you go off and do more work now) but do recognise (and say) that other people might be interested in pursuing these ideas and areas, or that you might do so at postdoctoral level (and think then – this is ongoing research).
- Be prepared to talk for a couple of minutes in an argued way about the main contribution your work makes – rehearse this.
- Make sure you relate to and answer the questions of each examiner.
- Thank the examiners at the end of the session.
- It is rather like a job interview – but you are not in competition with other people. It is all about your work.
- It's also like an examination but you will know more about what's being examined – your work – than the examiners do!
- If everyone relaxes and talks as intellectual equals about your work, you will probably have very little else to do to it.
- Good luck!

(adapted from Wisker, 2001, 2007)

Remember: many candidates have revisions to make (some large, some small), so prepare students not to be dismayed if this happens to them and they are asked to revise. They will need to clarify it, schedule it in and get on with it.

Colleagues in other universities produce advice sheets or websites. Some less formal comments can offer wise suggestions for handling examiners and their questions by somewhat flattering them, but not entering into a *real* argument as distinct from a discussion, unless there's nothing to lose. There *are* awkard examiners – this is a human interaction – but a respectful exchange is what you hope for and usually get.

Examiner behaviours:

The Antagonist: This examiner needs to win the argument and challenges what the student has written sometimes as if it is a direct undermining of their own work. 'That's a very good question, I can see I need to revisit that part of the work' or 'I am glad you pointed that out, when I rewrite for the book/article I will ensure I correct it/develop it/question it' all recognise the examiner's comments, but attempt to avoid the sense of undermining, threat, or major revision. Of course, major revisions might be suggested, but acknowledging how helpful and developmental these comments are is also flattering and collegial, so perhaps the student will be able to save major revisions for a future publication, and at least even in extreme cases, if they are acknowledged, the result should be modifications rather than a fail.

NB   this kind of antagonist is not the same as the standard European external examiner, who is called an opponent but actually most often engages in a collegial exchange, in public, over an hour or so. This kind of antagonist needs to assert their power to be right – and so acknowledging that is important before your student can deal with what needs to be clarified or corrected.

The Colleague: Most examiners do not set out to fail students, but rather to pass them probably with some refinements and corrections so that the thesis is a better piece. This kind of examiner challenges in order to engage in a dialogue between equals, so your student is well advised to respond with confidence, good humour, and an ability to go straight to the part in the thesis which is contentious and explain it – conceding the colleague is right and acknowledging that they are learning from the exchange with 'thank you for that, I thought you might ask me about … and so I have prepared … can I suggest we look at …'.

Your student keeping respectful control is a good sign of their success with either kind of examiner.

▶ **Workshops**

Such strategies are really useful if trying to manage a result that requires a few minimal as opposed to very full thorough revisions (i.e. on resubmission).

In the third stage of the research development and support programme at Anglia Ruskin University, we discussed the role of the viva in the final stages of the student's work, providing activities to help students focus on its demands, their oral skills in defending their work, and development needs to address before entering the viva itself.

One activity involves revisiting the qualities of a good PhD thesis, asking students to match their own developing thesis against identified qualities (Winter et al., 2000). Students are asked to consider in what ways their own thesis (under production or complete at this stage) matches the qualities identified.

They share evaluations of their own work with colleagues in small groups, identifying what work they feel they need to do in order to further or finalise their thesis so it is indeed a thesis of quality, likely to pass. To some extent, this reflective and evaluative exercise is a focus on the written text, of course it is, because that has to be perfected (as near as possible) before the candidate can defend it. But it also has to be owned. Some students are so immersed in their work that they cannot stand back from it and see it whole. The architecture of the thesis needs to become central to them. Those who might have been completing it piecemeal alongside a demanding set of domestic responsibilities or a job could often have difficulty in envisaging the whole 'building' of the thesis, the whole knowledge object which it represents. This is necessary so they can identify its aims and achievements, its conceptual framework, the decisions made, the successes and challenges, what they have achieved, and ways forward; all of these are areas which they are likely to be asked about in the opening questions of any viva. So, finalising, exploring, developing and explaining the research and its expression in the thesis to their colleagues is a necessary first step towards a successful thesis and an equally successful viva.

Students who can explain their thesis structure, and can answer questions about conceptual framework; the coherence between questions, aims, theories, methodology and methods; data collection and interpretation of findings; and conclusions, are those who are also more likely to be able to

see the holes or the gaps in their work and to identify weak points. We ask them to compare a thesis to a piece of architecture – firmly built and easy to get around, with a clear structure. I compare themes and theories to a piece of weaving. If the threads of the question, theories and themes established at the beginning are appropriately taken through and woven into the fabric of the whole throughout – occasionally some emerge as clearer than others, but always underlying, always holding the whole together – then this extensive piece of work is more likely to be coherent and defined, clearly conceived and described, and explored and expressed. The examiners can be seen as taking perhaps a single thread at a time through it, or focusing on a whole area of complex patterning, and the student can show they know how these elements fit into the overall pattern of the whole, and how they serve the purpose originally intended (or others which have emerged as equally important). But even at the point of submission, *some* theses still appear as 'patchwork quilts' or 'jumpers with holes' in them rather than a piece of weaving. You can see the gaps and the dropped stitches of the patterns of the argument and findings as a whole, the bits at the edges where arguments are frayed, not followed up in research collection or analysis, left hanging, untied. The researcher, later, can take further work forward, continue with these threads, but *the thesis as a whole* must be seen to be coherent and finished off.

▶ Mock vivas at Anglia Ruskin University – an example

On the research and development programme at the Anglia Ruskin University workshop, brainstorming and groundwork are followed by a mock viva that is staged, analysed and discussed, and then individual mock vivas, which are observed by others in the group so that each can identify the patterns of questioning and response, the kinds of language used and the thought processes expected of the candidate. This is not merely a routine recognition of a quality thesis in itself, it is also an on-the-spot activity where candidates are expected to conceptualise, indicate coherence and achievement of the whole of their research and thesis, and to be able to frame and explore this with their examiners, orally. This involves not only the ownership of the project itself, but the development of a certain facility with the meta-language of postgraduate research and the postgraduate thesis. It really is not an ordinary question to ask or answer 'What is the conceptual framework?' In my own experience, most students faced with this question, unprepared, will find it difficult to conceptualise their work and frame an

answer operating both at the meta-cognitive level at which it is pitched, and at the particular level of the thesis in front of them, reflective of and encapsulating a representation of their work.

In preparing students for mock vivas at Anglia Ruskin University, we were careful to concentrate on 'telling the story' and 'mapping the journey'; ensuring a clear conceptual framework running throughout. Students were encouraged, first of all, to focus on answering questions about their research question and aims; how their conceptual framework springs from this; how their research methods have enabled them to action and direct their investigations towards these aims; how their findings, analyses and results grow from the question; and their methods. Second, they were encouraged to describe the stages as a journey, the pitfalls and the creative leaps, and moments when the research fell into place. They indicate any problems experienced (many of these turn out to be related to methods). Some include: observations that failed to enable them to pinpoint specific change moments; questionnaires asking the wrong questions, generating heaps of information, missing issues investigated; and the moments when they learned to jettison information and focus tightly down onto what mattered, adding further methods and vehicles if necessary.

▶ The usefulness of mock vivas

Mock viva preparation exercise

Tutor: So I just want to ask about the shape of the viva. So, what sort of preparation did you do beforehand?

Student H: Anyway, she ran a few questions at me and we had a practice of dialogue, backwards and forwards and the kind of thing I might get, and then she said what you need to do is to prepare about 12 or 13 or so various angles on your writing and that should cover you if it's, say, 4 hours or something like that, but try not to be too wooden about it. You know, don't learn a set answer, but to have areas that you've prepared.

You might like to run a mock viva with your student *initially* at the upgrading/confirmation of candidature moment (for PhD), then at the end for viva preparation. Here are some questions frequently asked in a PhD viva. These are extracts adapted from the text of the CD-ROM *Interviewer Postgraduate*

Viva (Hartley and Wisker, 2004, 2011) which Professor Peter Hartley and I developed and have now re-developed. The CD-ROM is available from Pearson education, and enables students to interact with an examiner (there are four to choose from) who asks the typical viva questions – generic questions, not specific ones about their thesis of course. They record their responses, see what 'hints and tips' suggest what they could say in response to any question, and then see what the examiner says they are really looking for. Those who have used the CD-ROM have found it builds confidence in the expressing of complex conceptual elements – responses to questions about the conceptual framework or conceptual conclusions, for example – questions rarely asked orally except at a viva. It also builds confidence in defending and explaining elements of the research and the thesis, so that they can be more relaxed in the actual viva. International students have found it particularly useful to practise some of the responses and build their confidence in speaking about their complex ideas and research, in a language which is not their first language. You could use this, or develop a mock viva process of your own. Margaret Kiley has examples of a good and bad viva, used in the development of postgraduate work at the Australian National University, available on her website at https://researchers.anu.edu.au/researchers/kiley-mm.

Using the CD-Rom *Interviewer Viva*
It is useful to ask the questions – let the student answer and then fill in with hints and tips, following this with the examiners' views. Several of these exercises are useful for Australian PhDs, MA/MSc and BA/BSc students, too, to enable *clear thinking* as students begin to write up, rather than just as preparation for a viva. You could ask these questions, or give them to your student to consider and respond to; initially make notes, perhaps (if at a distance) sending written responses; or enable them to answer questions on their own, with you, or in a student support situation with others.

▶ Postgraduate viva questions

Choosing your topic
1 Tell me how your research area and topic/career has developed?
2 What made you choose this research?
3 What was your research question?
4 What attracted you to work in this context?
5 If you were starting again today, would you change your research question in any way?

Concepts and theories
6   Could you explain briefly your conceptual framework?
7   What are the main theories you have chosen to underpin your work?
8   Why did you choose these main theories?
9   Did you consider other theories or approaches?
10 In retrospect, are there any other theories or approaches you could have considered?

Your research methodology
11 What methodologies and research methods did you select and why?
12 Why did you not select other methodologies/methods?
13 How did you gain access to your sample(s)?
14 In retrospect, are there any other theories, approaches or research methods you could have considered?
15 What is the most important thing you have learned about research methodology from doing this work?

How the research progressed
16 What stages did your research go through?
17 Were there any particularly problematic moments that caused difficulties? How did you overcome these?
18 Did you need to make any changes to your methods when you were designing or carrying out your research? Why and how?
19 Did you have any particularly revelatory or surprise moments? What did you do?
20 If you were given the opportunity to start again, would you do anything differently?

Your research results
21 How did you analyse your data?
22 Why did you choose this form of analysis?
23 What were your main findings?
24 How do these findings relate to your previous work in this field?
25 What is the most important implication of these findings?

The importance of your work
26 How would you justify your work as being at the level of a PhD?
27 How do you feel your work fills a gap in knowledge?
28 Why does your work matter?
29 Are you going to take this work any further?
30 Would you suggest any further work for other future researchers?

There now follow extracts from the *Interviewer Postgraduate Viva* CD-ROM (Hartley and Wisker, 2004, 2010) as examples of questions, tips and what is expected. These could provide extended activities for a mock viva or insights for a student working alone. You could:

- Ask the question.
- The student answers.
- You run through the hints, tips and examiners' views together and *reflect* on the quality of the student's response and how he or she can improve the response.
- Ask the question again and they produce a more confident and focused answer.

Choosing your topic
1   How has your research career developed?

Hints and tips:
- Did you explain what choices you have made to reach this point?
- Did you look at what kind of research you have been doing? Why this interested you?
- Did you demonstrate your enthusiasm for research?
- Did you show how your interest in the present topic/area developed?

Examiner's view:
I am asking this general question to give the candidate a chance to relax and become less nervous before the really important questions start.

2   What made you choose this topic/area?

Hints and tips:
- Did you explain what inspired or interested you to pick the topic/area?
- Did you demonstrate that you are in a particularly appropriate context to look at the topic/area?
- Is it so topical that you felt researching it would be fascinating or useful or interesting or important?
- Did you show how your interest in the topic/area developed? For example, did it come out of any particular professional or personal experience or long-established interest or sudden life change?

Examiner's view:
I am looking to gain an insight into what inspired the candidate to begin the

research in the first place. I want to know if he or she has had a lifelong or relatively recent interest, and in what way this area or topic of enquiry enables the student to ask questions, to research something which fascinates him or her. Is it a professional interest? Is it a personal one, or both? Is the area of research and the research question really topical *now*? Would others be interested in it? Why is it an important question to be addressed or answered? Why does it matter? What prompted this work now? I'm looking for passion, commitment, engagement and enthusiasm here. This prompts the student to start to suggest that it is topical and then to define how the work makes a sound contribution to debates in the field.

3   What was your research question?

Hints and tips:
- Did you explain your main research *question* and mention any sub-questions?
- Did you indicate how you developed a question from a broad area of interest? Did you show how wanting to cast a perspective on an area, to ask questions about it, led to the question and sub-questions?

Examiner's view:
Here I need to find out how the broad area of interest in which you are working [has] developed into a specific question that can be asked and in some ways answered (sometimes asking reveals so much that the question can only be addressed and those complexities revealed). I need to know that a question has been developed, because otherwise the work might well be merely descriptive. I want to know how you have problematised the area or field, what elements of a broader area you are going to focus on here. There might well be many questions and issues in the broad area, so I am looking for the specific question and sub-questions that enable the candidate to interrogate and problematise the area.

Often we know the broad area of interest we are working in, but it is important to be clear about a major question that interrogates this area, that problematises it, and that engages in debates and arguments around it. For instance an *area* might be: 'Cultural difference and learning approaches', but the question could be: 'How does cultural difference affect learning approaches?' and the sub-question could then be: 'In what ways do culturally affected learning approaches (e.g. Western and Confucian learning) show themselves in the way students preconceive and approach their learning, their motivation and their outcomes?'

I am looking, also, for the boundaries to all of this, for the recognition that

other people or the candidate themselves at another time might wish to explore other elements of the area of research, other questions around it or developing from it.

Boundaries are important because the candidate might try and cover too many issues, accumulate too much information and confuse the clarity of the question and discussion, if the candidate doesn't have boundaries and a clear focus to the question. Having a clear question provides a focus, a way in to the area of work.

Concepts and theories

4   Could you explore for me your conceptual framework?

Hints and tips:
•   Did you explain how the research question(s) relate to or involved some key concepts?
•   Did you explain how the research question(s) relate to or involved some key ideas?
•   Did you explain how you selected theorists and reading that informed your understanding of the concept and helped you to ask the question(s)? How did they provide theoretical perspectives, and help you to engage with debates in the field?
•   Did you explain how the methodologies and methods you have used arose from the question and how the theoretical perspectives you have read about developed the question and helped you ask it?

Examiner's view:
I am looking to see if you have a thorough sense of the structure and design of your work, and of the concepts underlying it. You need to be able to show how the key concepts or ideas in your work are underpinned by reading in the appropriate theorists and experts, and that the questions you are asking can be asked using the vehicles, the methodologies and methods selected. I am looking for overall coherence throughout the research and an expression of it in the thesis, which you can explore here in discussion.

5   Can you explore any particularly problematic moments that caused difficulties? How did you address and overcome these?

Hints and tips:
•   Did you explain any stages that caused problems for you and how you overcame or addressed these?

- Did you explore any moments when the research met difficulties, such as inability to discover appropriate theories and theorists, to work at a conceptual level, and to draw conceptual conclusions; when the sample disappeared or you were refused access; or when a specific methodology or method did not yield the information and ideas needed and so you had to redesign the research approach differently and to express it differently?
- Did you explain how you identified problems and what problem-solving strategies you used to overcome them and proceed with the research?

Examiner's view:
This question wishes to discover how you deal with problems such as scientific experiments not working, the sample disappearing, difficulties with analysis and so on. It shows me that you can spot, deal with and solve problems and so can take a creative, responsive, developmental questioning and problem-solving attitude to your work.

These are fleshed out versions of some of the questions asked and tips towards answers on the CD-ROM *Interviewer Postgraduate Viva* (Hartley and Wisker, 2004, 2011). You might like to develop your own further, and/or ask these of your student, exploring the expected kinds of response. Students at a distance can be asked to send written responses to the mock viva questions and to rehearse them with a friend or a colleague, and with you in a last minute mock viva before they go into the real thing. However, although these questions have been put together based on research and experience – my own and that of Peter Hartley, Trafford and Leshem (2002b), and John Hartley (Hartley and Fox, 2003), students need to be made aware that there is no guarantee these will be asked, though some almost certainly will.

Specialised questions
Note that these are generic, that is, they are *not* the subject and thesis-specific questions that will very probably also be asked. It is useful to work with your student over these latter kinds of questions based on the following thoughts:

- Is there a particular 'take', interpretation, approach, conceptual interpretation of knowledge or a key issue in the subject underpinning this thesis, which will need clarifying and defending? What are the competing conceptualisations or versions?

- Is there a particular reading of a key theory, belief, ideology, text that needs clarifying and defending?
- Are there any relatively controversial choices, interpretations and arguments about the subject matter that need defending?
- Are there any relatively controversial choices about the use of specific methodology or methods?

There will also be some absolutely specific questions you and your student will need to rehearse, and you will have to determine these for yourself. Some which have related to my own students which have appeared in vivas include:

Student A (writing on access to higher education via regional colleges in Israel):

> Can you clarify and show me where you explore the underlying ideals of *democracy* and democratic education?

Student B (writing on gay male writing in a historical period):

> Your argument about the development of two different approaches in gay male writing, which you label 'radical' or 'assimilationist', seems to be related to different *forms* of novels ranging from self-disclosure to fantasy – why did you not decide to focus on *form* alongside the argument?

Student C (writing on Heads of Department in a teacher training college as middle managers):

> Your theories about middle management and role conflict are applied here to both men and women, but you express them as deriving from feminist theory. Why did you not concentrate on women managers? Is there some argument here about a feminised approach? How would it apply to men?

▶ Helping students to manage stress and achieve emotional resilience

Vivas can be very stressful moments, not least in the candidate's imagination prior to the event. Sometimes, imagining the viva and imagining being tongue-tied, inarticulate, unable to defend their work at a conceptual and critical level can paralyse students in advance. I have seen students develop

physical as well as emotional symptoms of stress which have nearly debili-
tated them and certainly hampered their ability to perform as well as they
can.

Providing mock viva opportunities and opportunities in critical friend,
community or support groups to rehearse some working of answers to both
generic and some specialist questions can help students find the words and
face some of the fears. In our University of Brighton research for an ESCalate
(Education Subject Centre, Higher Education Academy, UK) project on well-
being and emotional resilience among education doctorate students in three
UK universities, Charlotte Morris has found evidence of stress and of the
usefulness of developing wellbeing and emotional resilience (Wisker et al.,
2010). She builds on the work of Cristina Poyatos Matas (2008, 9). You and
your student might also find it useful to consult David Wilkinson's work on
fear and emotional resilience at www.fearcourse.com. While none of these
three research-based developments and publications deal directly with the
viva, it represents a very good example of a potentially problematic, feared
event, for which wellbeing, self-management and emotional resilience are
needed. Other work by Christine Ingleton (2000) considering international
postgraduates looks at confidence, pride and shame as motivating and
guiding factors, whereas Barbalet (1998) argues confidence and shame
develop as powerful emotions through social relationships in which a person
receives acceptance, recognition or disapproval. Ingleton uses Salzberger-
Wittenberg (Salzberger-Wittenburg, 1983), who argues that all learning
involves hope, uncertainty and fear because it arises in situations as yet
unknown to us. Its very newness is risky, then. The viva is a prime example
of a new learning situation, an examination in which agency and the ability
to use confidence to drive sound responses can be enabled through self-
management, using self-esteem, through remembering past experiences
which support a positive view of self.

Remembering past success and building self-esteem
Face the fears – what is the worst that could happen? How can you miti-
gate against this through appropriate preparation and expecting the unex-
pected?

Be physically and emotionally prepared through being well rested,
having eaten properly, keeping calm.

Remember positively that you have got this far so the thesis must be
good enough, and you're there to have a developmental but very rigorous
exchange with other experts.

Manage and avoid other stressful factors on the day – travel in advance, ensure someone else is picking up/taking the children to school (or whatever personal or domestic responsibility might keep your mind off the work on the day).

Imagine ahead – to the end of the day when this viva will be over – it has a time limit.

Start to construct positive stories of confident responses, knowing the work, intellectually enjoying the viva process, and avoid any negative stories of terror, inarticulacy and failure.

▶ **Conclusion**

Students and their supervisors should find it useful to prepare well for the viva and consider the strategies of self-management and positive thinking for emotional resilience, so that confidence and articulacy can drive the viva. It is useful to undertake mock vivas because they help prepare and rehearse the student, particularly in terms of conceptualising and clarifying their work, showing they are passionate about it, making it clear why they made the developmental choices they made, and how they *know* it contributes to knowledge and understanding in a major way. It is important for us to debrief and provide formative feedback so students can improve their readiness for the viva.

A viva is a real opportunity for students to articulate, explore and discuss their work with experts who have read it thoroughly.

▶ **Further reading**

Hartley, J. and Fox, C. (2003) 'Assessing the Mock Viva: The Experience of British Doctoral Students (Keele: Keele University Press).

Hartley, P. and Wisker, G. (2004, 2011) *Interviewer Postgraduate Viva*, CD-ROM (Sheffield: Sheffield Hallam University), 2nd edn (Bradford: University of Bradford).

Kiley, M (2011) https://researchers.anu.edu.au/researchers/kiley-mm

Leonard, D. (2001) *A Women's Guide to Doctoral Studies* (Buckingham: Open University Press).

Morley, L., Leonard D. and David M. (2002) 'Variations in Vivas: Quality and Equality in British PhD Assessments', *Studies in Higher Education*, 27(3).

Poyatos Matas, C. (2009) 'A New Approach to Research Supervision', in J. Barlow, G. Louw and M. Price (eds), *Social Purpose and Creativity – Integrating Learning in the RealWorld* (Falmer: University of Brighton Press).

Wisker, G. (2008) *The Postgraduate Research Handbook* (Second Edition) (Basingstoke: Palgrave Macmillan).

21   Supporting your student post viva/ exam

The supervision process is often thought to end when students submit the dissertation, or at PhD level, when they submit the thesis and undertake the viva. However, this only seems to be the end of the supervision project, because submission appears as such a cathartic and final process. In many ways, for the PhD in particular, the examination and viva are a major but not the final step to achieving completion. In the Australian system there is an examination alone, but UK and European students also have a viva, so they have to take into consideration comments on both the thesis and the viva experience in order to improve the thesis. I try to define the PhD viva as a formative assessment phase, so that students can see that examiners' comments aim to help them improve the thesis, rather than seeing them as surprisingly unpleasant attacks on their life work.

Most students undertaking a PhD have revisions, even if only minor modi-fications/amendments to improve the thesis and make it ready for others to read. Our supervision continues until the examiners, our students and we are satisfied that the work is as good as it can be to pass. In this chapter we will look at ways in which our supervision extends to support students *after* submission and examination, including (for PhD) the viva process, should there be revisions and resubmission.

This chapter considers:

- *the effects of and next steps following examiner response to the thesis and/or conducting a PhD viva*
- *the supervisor's role in interpreting examiner responses and their implications*
- *supervisor support, working in a partnership towards the student carrying out further work and resubmission where necessary*

The examination and viva process might seem like the end of the research and writing for a PhD student, but in some respects the work is still in process, the feedback still formative rather than summative. The aim is to produce a near publishable piece of work, which can be accessed by others and enters a scholarly dialogue in the field. Revisions to a PhD thesis are widespread, normal, and so our support for our student needs to continue beyond that submission and examination. Undergraduate and master's student dissertations are normally summatively assessed, subject to grades. This summative assessment is not a developmental process as such. When your student finishes, that is the end of the supervisory process. Should they fail, however, students are asked to resubmit, or to undertake a new dissertation. In these instances, supportive supervision for resubmission is as important at undergraduate and master's level as it is for a PhD, where revision or work to do and resubmission are actually many times more common than passing or failing outright.

Sometimes, mistakenly, for PhD students, the viva feels as though it might just be a discussion among near equals, nothing too taxing because the main work is the thesis. How surprising it is, then, for both student and supervisor if there are revisions to be undertaken following a viva and the examination process. Students who need to revise will need supervision and support through what could otherwise be a painful and isolated process. If, however, revision for improvement is seen as a natural step in the production of a PhD, and we can be constructive and supportive, revision can be viewed rather like responding to referees or reviewers after submitting an essay to a journal – a natural part of the development process. For students on funded projects, and international students whose visas and money might run out at the point of the viva, it is important that revisions are seen as a normal part of both our supervision practices and institutional support practices. It is important to avoid loss of supervision and all rights to the library, internet or funding, because in such situations, how can a probably distressed student focus on producing high-quality work in a short timeframe? As part of our research into doctoral student learning and supervisory practices (Wisker et al., 2010), we have found that students have reported a great deal of stress at these moments, which are felt by some as the loss of the supervisor (Wisker and Robinson, 2012).

The 'discussion among equals' view of a viva is only partially true because a viva is an examination, a defence. Corrections required of a thesis, following a viva, relate to improving something, which might just be 'good enough', or nearly so, so far, and could be really excellent. Comments and changes required to a PhD thesis are often developmental. Some could be interpreted through negotiation and the result should be a *good* or *excellent*

PhD. Passing outright is rare with a PhD/EdD/PrD, and examiner responses usually include a sliding scale of different modifications insisted on so that the thesis can pass and be of *quality*. This chapter, then, will concentrate mostly on the PhD rewriting for resubmission, although it can inform supervision for supporting undergraduate and master's students' rewriting.

The viva in itself is an examination. The link between performance in the thesis and performance in the viva is crucial, and has to be clear and well articulated for the PhD to be awarded. But let's look at the reality. The thesis is rather like a journal article, or a book sent to the publishers. Although the author and his or her editor (you, the supervisor) may feel it is well thought through and well enough expressed, nonetheless, others are now in judgement on it, others who are not close to the project and who bring a more objective scrutiny. Like a journal article or book, a thesis usually requires revisions in order to be acceptable to its audience. That audience, here, is the examiners and potential other readers in the wider academic community. It is important that it is sound in its processes, conceptualisation and final presentation, structure and arguments, use of data and analysis, theory, choice of methodology and methods, conclusions, overall coherence and referencing, and elegance of expression (see Chapter 7). The viva also needs to be a clear, authoritative defence of the thesis and the research.

Very few students pass a PhD outright first time with absolutely no corrections (in the UK, around 12 per cent). It is likely that post-viva revisions will need to be supported by supervisory dialogues and guidance. There are 4–5 outcomes following the examination of a thesis, either standing alone, as in some countries, including Australia, or followed by a viva, as in the UK, New Zealand, Europe and elsewhere. Pass without any corrections, minor modifications, major modifications, resubmission with or without a viva, and fail.

The viva can be a celebratory moment to explore work with those who treat the student as a collegial equal, it can be a bruising experience, and it can be all the points in between. We explore some of the issues around the viva in Chapter 20. While we consider rewriting, we need to look at the sometimes traumatic experience of the viva, where students expect it to be a rather pleasant collegial activity, and find it gruelling. They may have expected their thesis to be finished, completed, with no need for further activity or improvement, and find they have to open it up again and change and/or upgrade parts of it, both at the cosmetic level (typos, labels), and sometimes at complex theorising, conceptual levels. They may even need to revisit the theory, methodology, and data analysis in a substantial fashion. Some gruelling vivas aim at further clarification of the thesis, which is actually felt to be good, passable, even excellent, and can lead to the expectation of few changes. Some vivas lead to a host of changes for a host of reasons –

the viva is poorly managed, the thesis the candidate has written is not the one the examiners want and they feel they need it to change substantially, or the thesis and/or the research appear to be flawed and need to be clarified and improved before being passed. Whatever version of a pleasant or gruelling viva a candidate experiences, the supervisor is there (often) during and afterwards to help them make sense of what happened, and what needs to be done.

There is very little literature of testimony to this experience, so I have consulted with my co-researchers on the Doctoral Learning Journeys research (2007–2010), and the 'parallel' research (2003–2011), to explore our own experiences. One example offers both extremes of the viva experience:

For one colleague, A, her viva had allowed her research 'to fly' and she knows she was privileged (maybe lucky) to have had this gifted to her by her examiners. Not every student has such a life-affirming experience and it was not until she became an examiner that she started to appreciate the stressors associated with examining PhDs and the uncertain and somewhat swampy ground of being an examiner.

For one colleague, B, her viva was an assault course of challenging hurdles that instead of opening up a sense of mastery left her feeling debilitated and utterly sure she had failed. This sense of failure was so complete that she was unable, at the time, to acknowledge the final positive message of 'congratulations, we feel happy that the thesis does meet the required standard for PhD'. For her, the prior tortuous verbal encounter (lasting over 2 hours) meant that the sense of achievement was totally lost. Her aspirations for a research and career-enhancing experience had been dashed and it took considerable time and support before she was able to put the viva in some sort of context.

My own viva was a discussion between seeming equals and both intellectually stimulating and affirming. I had just a couple of typos and references to change.

These are examples of positive and negative experiences, whatever the outcomes. One way of helping students to manage the process is by sharing it – being present, and by recording it (notes), then discussing and planning afterwards – not leaving the experience up in the air and unprocessed.

It is useful to ensure very careful note-taking at the viva – your own as supervisor, if you are allowed to be there; perhaps the chair's, if you can't be there; or the administrative officer's, if there is one. You need dependable notes of the areas to address to improve the work afterwards.

These notes inform an initial basis of a 'recipe' of work to be done before any improvements or resubmission. They will be augmented by full reports and detailed requirements, but act as useful broad areas to consider, preceding a full report, to get the process restarted.

What do the examiners suggest or insist on at the viva? Or if there is no viva, following their reading of the thesis? Consider the following areas for work: you could audit these with your student after the examination and viva and, matching the audit against the examiners' requirements, word for word, draw up a 'to do' list to action the points, a timeline for the work – for interim supervisions – and scrutiny of work produced.

▶ Different results of a PhD viva and examination, and some suggested supportive responses

1 **Passing without any alterations at all**: wonderful! The supervisor and student celebrate, and start to discuss future publishing, conferences and jobs.

2 **Passing except for a few minor revisions**: same kind of response as above followed by, perhaps, a few meetings to clarify these revisions, if they need it, based on the careful notes taken by the supervisor and student at the end of the viva, and the official examiners' reports. After the revisions have been completed and the thesis sent to, and confirmed as acceptable by, the examiner(s), chair or whoever is designated to make that decision in this instance, then the celebrations and discussions about publication can begin in earnest.

3 **Passing except for a few, quite substantial revisions** and probably six months to a year to revise: responses as above, but with much more considered scrutiny.

Consider: What do the examiners suggest or insist on at the viva (or from the examination if no viva is conducted)? Have they indicated a further area of reading or theorising; further work to be done on the organisation of the thesis to make it more coherent; further clarification or recasting of sections; further analysis and interpretation of findings; the clarification of conceptual findings; or cutting stray areas of discussion that distract from the main work, for example, too much historical background and too much of a theory or a line of argument that in the end does not really underpin the work?

Base further sensitive, focused work, supported by sensitive, focused supervision, on notes taken at the viva (to start the process), and formal requirements post-viva. It is important to get agreements post-viva about exactly what the examiners require, and to arrange a session clarifying the exact implications of the workload (students are often in shock!). I prefer to do this as soon as possible after the viva. In the perfect situation, *initial* discussions would take place *immediately* following the viva, sitting with notes and a cup of coffee, to keep the process going. The student will need further clarification, and will hand in work to the *formal* advice or demands, but can start to identify with you an agenda for further work on expression and alteration. The student is less likely to feel this is a moment of loss and absence, but instead one that is a natural process leading to refining work for success. Over the days, weeks or maybe even months, using this initial reflection and planning as an agenda for improvement, you and your student will need to work carefully to the advice and demands from the examiners to produce a thesis that can pass. Involvement of a critical friend is helpful. Support rewriting and then, hopefully, the results outlined in 1 or 2 will follow.

Note that many universities move straight from option 2 to option 4, so that substantial changes require formal resubmission and the option to undertake a second viva.

4   **Resubmit**: This is a much more substantial task involving all of the above (2 and 3) activities, but probably also some new work, further analysis, restructuring, fundamental re-working, and re-directing the work in relation to the viewpoints and interpretation provided by other theorists, and so on.

Collate all the examiners' advice and requirements into a list. Students could be asked to draw up on one side of an A4 sheet of paper the preferred new shape to the thesis, and/or a 'to do' list of any minor or extensive new work and any changes. It is important to have a realistic timescale and to build in sessions together to review the developing work before it 'goes cold'; before students could develop a distance, fear or writing block about it; or, in some cases, lose their sample, place to live, time, and the topicality of the project.

There are particular potential problems here for some international students, who might find their funding, fees, visa and rights to library and other university facilities have timed out. You will need to check the regulations about student rights for the period following the thesis submission and before resubmission, so that your student is not left

feeling unsupported and as though they have overstayed their welcome, just at this most sensitive moment. For some international students, continuing work, and your comments and support of this work, might have to be at a distance, using email. If this is the case, then ground rules for submission of changes and responses need to be established, emails seen to work, a further meeting set up if possible, and several friendly supportive nudging email exchanges added to the ones dealing with actual work, so that the student does not lose momentum upon return to the complexities of homeland, work, family and so on. This is especially important since the students are returning having *not* yet achieved what they set out to achieve – or so it appears, and there could be loss of face and loss of self confidence..

With an on-campus student, or one who lives at an accessible distance, you could set up regular work review meetings, establish work to be completed in advance, measure the work against examiner demands – interpreted together – and advise the student to resubmit when ready and when you have read the work, matching it against the examiners' requirements.

As with 5 below, it is sometimes useful to have some fresh support if there are major reinterpretations to be conducted and major revisions to be carried out. Perhaps another colleague might talk with and support the student, particularly if the area that needs rewriting is his or her specialism. Maybe the colleague can help with areas in which you feel the need for support, or some fresh reiteration of your advice (that was ignored or overlooked?) from someone else will help. Maybe the colleague can help with recasting the work, with statistical interpreta-tion, with a specific focus on, for example, areas of content or context, further insights into theoretical and critical approaches now realised to be necessary in interpreting the findings – whatever work needs refin-ing, including and reinterpreting. But beware that the colleague does not lead your student off the point at this stage. The intention is to rewrite *this* thesis and follow the examiners' comments strictly, rather than going off at a tangent.

Keep progress checks of developments so you can both identify progress towards achieving the examiners' demands. Some students might be tempted to race at the changes, carrying them out rather superficially. If they have been asked to resubmit, there is probably some substantial rewriting and recasting to be done. If they race, under-theorise and under-conceptualise at this stage, or hand in something that is unclear and fragmented, they stand the chance of not having their work accepted and passed, which would be a very bad outcome.

Proceed carefully and slowly, allowing time for any rethinking, so that the rewritten thesis is both theoretically sound and coherent in expression.

At the moment of resubmission, it is essential that your student includes a detailed checklist and discussion, indicating the examiner demands matched against the new work, chapters and cuts, and indicating changes in the text with, for example, post-its and a cover note. In this way, examiners can find their way around changes, to their satisfaction, rather than re-reading almost from scratch (in which instance, heaven forbid, they *could* find something else).

5 Fail

In the most logical circumstances, if *you* have done your job properly, students are unlikely to have your agreement to submit if they are likely to fail. However, things go wrong. The anecdotes and horror stories are legion, as they are whenever there are human interactions and differences of opinion. It is important that your student does not get caught up in this if possible. Examiners dispute, and there could be different politics, values and interpretations of the subject and of work produced. Perhaps your student does not clearly defend the work, although the thesis itself is relatively strong. Perhaps examiners are seriously doubtful about the sample and the validity, even though you and the student thought it might be adequate.

While you comfort your student, you also need to find out any rules for potential resubmission and begin the process of re-conceptualising and rewriting (as above, in 2, 3, 4) if this is an option, and if you both feel it can be done in the light of the examiners' comments.

If it does not look like this project can be rescued at all, or if your university refuses further attempts following a fail (unusual), it might be better to:

- accept defeat – and ensure your student does too, and/or
- devise together a more suitable and manageable project, perhaps containing the best elements of the one that has failed, and start again. You will now know more about how the student goes about research, learning and work, and it is possible that this *second* project might be much more realisable as a successful piece of research. It might be beneficial both psychologically, and, given the changing nature of the new work, logically, at this stage, to bring in a third party or another colleague to support some of the new work or to provide a different perspective and different kinds of guidance on the re-conceptualising and rewriting.

▶ Rogue examiners and disasters – helping students manage their feelings

So far, this has seemed a logical and straightforward, just process, but there are numerous reports of rogue examiners, externals in the main, but sometimes internals, too. While such examiners might think they are defending the quality of scholarship in behaving in a rigorous way in a viva, which is a dynamic, real-time process, this can sometimes appear (or be) aggressive and far from formative. The cut and thrust of scholarly dialogue and reaction, argument and disagreement among equals takes on a different tone when the scenario is in fact that of inequality, not equality, where the examiners and chair of the viva clearly have all the power and the postgraduate student feels attacked, silenced, demoralised and bruised in the 'collegial discussion' of the viva. Eley and Jennings (2005) explore a viva scenario that goes wrong and consider the student's feelings. Here they try to separate the student's feelings of being attacked, and the examiners' engagement with the flawed thesis. They also try and engage with what has to be managed and formally reported should the viva seem utterly unfair. Formal procedures of reporting a really destructive viva do exist and, if there is a need, poor behaviour on the part of the examiner(s) and within the whole process need to be brought in the form of a letter of complaint to the university body that receives such letters. In most cases, it is probably more likely that the supervisor and student can discuss a very negative experience together and fish out of it the learning points with which the student can deal. Sometimes any rigorous verbal engagement with your work seems like an attack. Perhaps an examiner who appears as a rogue would be surprised to be defined that way. Entering the cut and thrust of an academic exchange between equals in the viva might seem like a good idea for an external examiner, but a student under examination is not in the same position of power as a postdoc equal. The dynamics could be very problematic. It is hoped that extreme cases of negative, destructive vivas are very rare, or non-existent. As supervisors, if we experience or discover that the examiner has been bullying, or has prevented the student from making his or her case, we would hope the chair would handle the viva with sensitivity and re-direct questions, and that any committee or chief examiner looking at the resulting reports would be able to make a decision to overturn anything which misrepresents the candidate's work, is too extreme and unfair. However, the dynamics of a bad viva, rather than a challenging one which shows up flaws in a thesis not yet ready to pass, are dangerous for our students and here, I think, we need to be strong and act as an advocate. We need our student and the internal examiner (unless he or she is the rogue, in which case, hopefully, the external examiner) to decide if

there needs to be any formal complaint. Formal complaints are rare but not unknown. Whatever the decision, if the student has a lot of work to do and feels he or she has had a destructive viva experience, we need to consider how to help the student manage his or her feelings and how to help disengage from these feelings in order to decal with the necessary revisions. Some of our work on emotional resilience and wellbeing (Wisker et al., 2010) could be useful here – so that students consider persistence, ownership, the right to reply, and the need to move beyond feeling aggrieved into constructing something positive for their own peace of mind and developing what I term the hide of a rhino, resilience, with a good clear argument to back it up.

▶ **Possible areas to address following examiner's demand for rewriting**

Theoretical perspectives
Has the student included a fully developed, engaged, referenced discussion of the appropriate themes and theories? Some examiners suggest other theoretical approaches and background arguments. These need to be read, processed, analysed and fed into the thesis. Maybe suggested developments will have to be undertaken with supportive supervision throughout the work, and these could involve methods, analysis and conclusions. Certainly, theoretical perspectives and reference to theorists would need to be threaded all through the thesis.

Gaps
There may be gaps in the student's reading, in methods, in the expression, in interpretation of data and in the arguments arising from analysis and findings. The student will need to revisit the data and its analysis, then discuss it in an argument related to this. The student could be enabled by prompting questions, for example: What else could be suggested here? Are there contradictions in our reading of *this* … in relation to *that* …? What else could you say here? How much more analysis and discussion could you produce here?

Claims are unsupported by evidence
This could be a problem in any subject area where a student omits the link between research claims made and the evidence indicating they are well-founded. The student might not have the data, quotations, statistics or references to back up a claim, or might need to revisit this evidence, selecting from it more precisely in a careful, focused manner, accompanying evidence by signposting and reflection so it substantiates its claims.

Sample, methods, data

If the sample, methods, data set and findings are a problem, the student might have to revisit the design of the study and even redesign as well as gather new data. If such large-scale revisions are necessary, they will need your support to undertake them, to re-question, redesign and rewrite in line with new analysis of new data.

Looking at research (Holbrook and Bourke, 2002b; Trafford and Leshem, 2002b) which considers examiner reports, we see that often examiners might disagree with something simple, or substantial, such as conceptions of the subject, epistemology, research design, and still pass the thesis, but that they could be tipped over into failing it or demanding major revisions rather than accepting this as a perfectly creditable, albeit, a *different* 'take' on the subject research if the thesis is poorly presented and written. Analyses of examiner responses and evidence from vivas indicate both a mixture of examiner responses that would lead to specific revisions, and a holistic viva experi-ence in which personalities, interaction, and the dynamic of the moment (lack of control by the chair, examiner rivalry or narcissism, candidate seeming unable to articulate what's asked for at that moment) tip the result into a fail. For the read-only, no-viva thesis, the master's or undergraduate dissertation, personalities in the room are not an issue, but presentation is.

If students 'fail' or have to resubmit, whether the result is 2, 3, 4, or 5 above, they would benefit from a meeting in which a new agenda, timeline and tasks are decided in order that they can visualise that it is *possible* to rewrite, resubmit or start again. An upbeat, organised supervisory approach might help at this stage.

In Harriet Churchill and Teela Sanders' book (2007), which compiles discussions, evidence and cases, Sonali Shadh expresses her surprise at how long it took her to get the absolutely final PhD finished,

> I was so relieved and excited when I saw all seven chapters of my work printed and bound together that I never imagined that the end was not yet in full view. The end was, in actual fact, another year away, which I discovered after spending two hours trying to defend my thesis to a couple of strangers, only to get referred and be given another year to rewrite the whole thing before resubmission.   (p. 121)

In the same book, I talked about working with one of my own students through and beyond the viva, to completion:

> Together with the supervisor the student reviewed the recommendations

of the examiners, turning the comments into an agenda for the new work that would make more use of the research question, argument and the data. A revised timeline, some targets and serious discussions about the elements of the thesis that required clarity and conceptual work supported this agenda   (p. 121).

Remember these four final points:

- Make sure that advice and decisions, details of changes, due dates, etc. are all clear and are understood by the student.
- Make sure corrections are clear and advise the student to produce a clear cover note explaining how and where they have fulfilled examiner requirements in any resubmission, matching examiner comments with page numbers where the changes can be found, and in some cases resubmitting a tracked changes e-version of the thesis along with the final corrected version so the changes are visible.
- Congratulate the student on engaging with the viva and producing a thesis which needs some further work to be passable or even better. This has been a long haul and the student is on the way to achievement (we hope) – a congratulatory experience helps motivate the student for the rest of the work.
- With sensitive support in place, this can be a developmental moment, rather than a disaster.

▶ **Further reading**

Carter, B. and Whittaker, K. (2009) 'Examining the British PhD Viva: Opening New Doors or Scarring for Life?' *Contemporary Nurse*, 32(1–2), 169–78.

Churchill, H. and Saunders, T. (2007) *Getting Your PhD* (London: Sage).

Eley, A. R. and Jennings, R. (2005) *Effective Postgraduate Supervision* (Maidenhead: Open University Press), pp. 156–61.

Holbrook, A. (2001) 'PhD Examination – Assessment's Least-Mapped Frontier', paper presented at AARE Conference Fremantle, December.

Wisker, G., Morris, C., Cheng, M., Masika, R., Warnes, M., Lilly, J., Trafford, V. and Robinson, G. (2010) 'Doctoral Learning Journeys – final report of the NTFS-funded project'.

Wisker, G. and Robinson, G. (2012) 'Doctoral "orphans": Nurturing and supporting the success of postgraduates who have lost their supervisors', *Higher Education Research Development.*

22 Life after the research project: sharing research, presentations, publications, identifying post-graduate/graduate outcomes, and research capacity building

This chapter considers our roles with students after they have effectively and successfully completed their research project, and how students can be encouraged to utilise their research and experience, both towards various forms of dissemination and the use of their research skills in employment, whether for academic or academic-related jobs, or in other roles. The chapter is in two related parts. In the first instance, we raise issues of academic identity, postgraduate skills, and employability. Not all students will want to use their research skills directly, and those who have been studying to feed into their professional roles might not want to change employment but to enhance their current roles through the status of the qualification and by incorporating these new skills. Next, the chapter focuses us on presentations and publication opportunities. Many postgraduates will, of course, want to share their work in conferences and publications long before they have finally handed in the thesis or dissertation and will need support in deciding when, where, how and what to present or publish. Similarly, students should be thinking throughout their research about the kinds of skills and learning outcomes that they are likely to achieve, both through undertaking successful research (and some unsuccessful research) and taking an active part in research development programmes. It is increasingly

important that students are clear and articulate about the variety of skills they have developed in completing research, and producing dissertations and theses, so that they can identify these skills to current and prospective employers. This is important to ensure their employers know how they have benefited from their studies and can enrich their professional work, and hopefully be recognised, rewarded, promoted for the development and practice of these skills and capabilities. Graduates with research skills should be able to evidence skills, from ideas-generation through hard, steady, enlightened work processes, articulation, and completer-finisher practices. They should evidence complex, conceptual thought and conceptually informed decision-making, the ability to ask questions, problematise given and established behaviours, seek and identify ways of seeking, finding and using alternative ways of practising and thinking in order to create ideas and new solutions to problems, create knowledge, and share and communicate understanding and new knowledge. They should be able to evidence and practise these and a host of other skills and capabilities essential for human growth, the improvement of the quality of life, as well as the sustainability of a competitive knowledge economy. When we work outside the university with employers, or in a political capacity, it is important to have that message clear to engage those who could make full use of and recognise them, with the qualities and skills our research students bring in practice, so that these are used, and the students employed, and offered further opportunities to use what they have developed, to everyone's benefit.

This chapter considers:

Postgraduate skills: identifying and reflecting on research skills, values and research-as-learning outcomes for employability and life
- *developing further research*
- *academic identities and jobs*

Academic identities: being recognised as an expert – seeking a place in the academic community and in other jobs or roles
- *sharing and disseminating: sharing research*
- *developing the work (or parts of it) for presentations at work-in-progress sessions and major conferences*
- *developing the work (or parts of it) for publication in journals and books*

The completion of the research project is an exciting moment, but it can also leave a student feeling somewhat adrift – this is what they have been working towards for such a long time, and it may have taken over their life. What's next?

The supervisory process does not end with the successful dissertation or thesis. Indeed, what you might have established now is an ongoing academic working relationship. Part of our work as supervisors of postgraduates is the induction and mentoring of new academic research and teaching colleagues, who entered the discipline and research culture upon becoming a master's or PhD student, and upon graduation also graduate into a new relationship, which has been growing alongside the development of the research and the thesis, of academic colleagues.

Certainly, students expect some hints, tips, suggestions and invitations to carry out further work, further research, publications, information about conferences, and suggestions for furthering their academic careers. They also expect references, and some who stay on in our universities continue with us as co-researchers, while international graduates and others who move back home after graduation can be part of a network of international and national research colleagues, co-writers, researchers and presenters.

One of the benefits from the large PhD programme with which I was involved between 1997 and 2010 has been that several of our graduates have been co-researchers, co-presenters and co-publishers since 2005, with increasing autonomy and restructuring of any existent hierarchical relationships. I also co-published in 2010 with another ex-postgraduate student from another group, the English literature study group '4 guineas'. That group has maintained its community support of each other so that several co-publish and support each other's work years after graduation.

Reminding ourselves and our students about the visions and achievements of research, one of the major gains from a successful piece of research is the student's entrance into the academic community. For undergraduates and some postgraduates this might be the first piece of substantial research they undertake, but for postgraduates and undergraduates alike, it is unlikely to be the last. Research takes many shapes in a wide range of jobs, from exploratory work to evaluation, so most of our undergraduates will use their research skills, depending on their choices of future study, career and the kinds of work they are called upon to do in the future. For some, job-related research will involve them in report writing, consultancies, and summarising and synthesising the work of others to advise on decisions. For others, academic research will be a major feature of their future, whether in terms of continuing professional development, work-related or more theoretical research towards qualifications, or as part of

their formal research activity in research projects. Judy Newman (2001) identifies our ongoing responsibilities:

> I don't underestimate the many miseries of postgraduate studies or the need for first-rate supervision, primarily in intellectual terms but also as part of a mentoring process. Like every other supervisor I know, I spend a lot of time writing references, helping with funding applications, making sure postgraduates get to the right conferences, and responding to tales of woe. But there is a big difference between smoothing the path to knowledge, and managing students' ideas; between giving professional advice, and seeing the doctorate as merely part of the training of a professional group.   (Newman, 2001, pp. 16–17)

There are many statements about the importance of research and research skill development, to economic growth and to social justice. Some of these values need to be borne in mind when asking why we undertake research and what use it is to society more broadly, and to knowledge construction in the disciplines, as well as how it has affected the individual and contributed to human good and social justice.

Recently in the UK, David Willetts (2010) reasserted the importance of research development, while also asserting the importance of good teaching: 'A strong research base is vital for our future in a global knowledge economy … strong in both fundamental, curiosity-driven research and research applied to the challenges facing businesses and public services … . Science and research are the life blood of many sectors essential to growth and a rebalanced economy.' And: 'Research not only pushes back the frontiers of knowledge but supports growth in the economy by boosting the performance of business, producing highly skilled people, improving public services and policy making, and by attracting R&D investment from global business.'

The problem with the commodification of higher education and students, and the equalisation of education, particularly postgraduate education, with outputs, impacts, and economic growth is that it turns students and their research areas into equally measurable commodities, in which the life-changing elements, the intrinsic delights, the varying approaches, time to completion, and even disciplinary contributions become part of a buffet of knowledge construction and production. Erica McWilliam (2009) sees risk management and risk-averse behaviour as well as an undermining of research in some disciplines, while others who can more easily identify their outputs in utilitarian and capital production terms are privileged for support, recognition, and student choice. In this unequal economic relationship the humanities are bound to lose out as less immediately or recognisably useful,

their achievements in research terms less transferable to the world of work than the sciences.

In her recent British Academy lecture and her book (2010), the philosopher Martha Nussbaum reasserted the crucial importance of the arts and humanities, which currently, internationally, are being somewhat sidelined in pursuit of a more utilitarian version of the reasons for and usefulness of research. She argues that worldwide we need to consider that human abilities and development are not just to feed an economic machine for gain, and uses the utilitarian philosopher John Stuart Mill in emphasising how he valued the teaching of arts and humanities in Scotland. When our students graduate with their research degrees, they will be expected to put them to good use, but good use is not just economic gain, competitiveness in a knowledge economy, and while the language of human capital predominates, humans are more than just capital. We will look at some of the skills research students develop which they can identify with and highlight when applying for jobs, promotions and funding opportunities, but it is important not to just see the production of researchers as feeding the economy at a certain level. The raising of thinking and conceptual, critical and creative abilities and skills can be turned to a broader good than economic gain in competitive markets. In both her talk and *Not For Profit: Why Democracy Needs the Humanities*, her accompanying book, she indicts ways in which the humanities and liberal arts are being increasingly undermined and undervalued in the current context of 'the unquenchable thirst for economic growth that drives education policy around the world', and considers how John Stuart Mill 'could have imagined that disciplines such as history, literature, classical studies and philosophy would be valued only to the extent that they can sell themselves as tools of a growing economy'. Nussbaum goes on to position the UK's REF (Research Evaluation Framework – a way of measuring research quality, particularly through attaching a value to the impact of that research) because of the ways in which it claims it can measure the worth of research and learning, seeing it as 'the latest assault on humanistic values [and] an insidious threat to the rich idea of learning', which was Mill's vision and plan.

Your students might well consider the variety of ways in which their research and the research capabilities they have developed can be useful – in employment, in feeding into creativity and humanitarian development, in enriching their own and others' lives, in pushing forward the boundaries of knowledge for competitive gain and for the human value of democracy and social justice, and also for their own enrichment as individuals.

It might be useful once the research qualification is achieved to review the variety of that achievement in the light of the competing visions and

agendas. Research abilities help humans to address significant questions about the ways in which we might improve our world, and these questions are not just about economic competitiveness, they are also about equalities, quality of life, and self-development and that of communities. Stepping back from a purely utilitarian view can help us appreciate the 'usefulness' of research in the arts and humanities, community-based research, and the achievement of research qualifications for the over 60s (the greatest growth area in Australia). This rather visionary view, which aims to remind us about social responsibility and human capability, in no way ignores the importance of research skill development, the need to get a good job in order to put these skills into effect, and the importance of sharing research with others. Some of the 'impact', it could be argued, is on enrichment of what it means to be human, and human potential, while some of it is on effective social and economic change and growth, where impact is more usually located in measurable terms.

▶ Generic skills and employability

The growing interest in research students' development of generic skills and their employability is part of the increasing focus on research as a job, so that doctoral students are called 'early career researchers', as a contribution to the knowledge economy and as a return on individual and national investment. The interest in skills development alongside the PhD has grown internationally, and actually has a long history. Cryer (1997) suggests doctoral students should recognise that generic, postgraduate skills developed during study could equip them for employment in a variety of contexts, while Francis (1997) and Leonard (2002) indicate that personal expectations are more likely to be achieved than career expectations.

Few regret doing a doctorate, or what it has cost them. Of course, the most disgruntled may get left out of samples. There are certainly horror stories of bad supervision, wasted time, too heavy teaching requirements on low pay, and exploitation in labs; and initial hopes may have been changed and modified along the way. Nonetheless, 'a self forged through tackling the difficulties of research, especially when stress from other sources is high, is a new self. So is the self that overcomes the doubts about ability to do the work' (Francis, 1997, p. 18, in Leonard, 2002, p. 59).

Contribution to developing knowledge in disciplines is a very important product of research. Students should be encouraged to continue with research if this has been something they both enjoy and for which they seem to be developing/have developed the skills. They also need the oppor-

tunities to identify such skills developed during the course of their research, since many of these are directly transferable into paid work. The achievement of some suggests to employers an ability to undertake a whole variety of projects and roles. Identification of transferable graduate and postgraduate research-related skills enhances self-esteem as well as opportunities in the job market.

Research undertaken by Vitae, the UK organisation that supports the development of the broad range of researchers, including postgraduates and those involved with any element of a research career, indicates that due to scarcity of opportunities in the HE market, many postgraduates do not immediately gain the academic jobs towards which they have been working. This will no doubt worsen with the comprehensive spending review of 2011 in the UK and similar cuts in funding to universities internationally, where not only could funding for postgraduate students shrink, including any bursaries or funded places, but the number of postdoc roles, fellowships, visiting academic positions, part-time teaching roles and other first research career stages could also be severely truncated, leaving newly qualified postgraduates wondering where to take their careers forward (After the PhD, Vitae, 2011).

With funding cuts for higher education in many countries internationally, and the comprehensive spending review in the UK (2011), it is not a very bright future picture for postgraduates seeking their first and second posts postdoctorate. Many will have to move, possibly to another country, to pursue academic careers, and many will instead take their research skills into careers which are not in research and not even in academe. A survey carried out by Vitae in 2009 showed that only 23% worked as research staff and 14% as lecturers.

Åkerlind and McAlpine (in press) note that postdocs cannot expect to get academic jobs upon completion. Akerlind looks at early career researchers and researcher identity (Akerlind, 2008). In later work, she found a lack of academic researcher focus on development as contribution to a community, with more of a focus on their own self-development. Akerlind was surprised to discover that researchers lacked a focus on developing a community:

> very much on the internal consequences of growth as a researcher, that is, the effect of growth on *themselves* in terms of their increased sophistication as a researcher. Little awareness of the possible external consequences of growth, in terms of the potential for this sophistication to lead to external benefits, through an enhanced capacity to contribute to a field-of-study or larger society, was expressed

although she acknowledges that could be an issue with her sample and questions. It does, however, present an issue for research careers, research capacity building and the kind of community and networking which we are focusing on throughout this book, where postgraduates develop into our academic colleagues and/or take their research skills into business, commerce, education and other roles. This can then help to build understanding, and knowledge transfer and exchange links between universities and business. The entrepreneurial, imaginative, alternative risk taking and the patient, tenacious and above all persistent are the most likely to be able to adapt to the problems this throws up and eventually use their skills appropriately. The notion of emotional resilience and confidence appear here again as they did in Chapter 20 on the viva, but coupled with this is a professional, businesslike focus on identifying, building on and marketing the postgraduate skills base achieved through successful study.

Terry Evans considers the perception of and strengths of part-time postgraduates in this light:

> Common criticisms of the 'traditional' PhD research degree, in Australia and overseas, are that it is (now) too narrow and specialised for either the graduate or their research findings to be of utility beyond their specialism, the graduates are limited in their communication and workplace skills, and their employment opportunities are relatively weak, especially given the high costs of their research degrees. However, the rise of part-time candidature and of professional doctorates – commonly involving research in workplaces or professions – suggests that, if this criticism is valid, it would be unlikely to be valid for part-time PhDs and professional doctorates.   (Evans, 2008)

▶ Skills and transfer into the job market

However, not all postgraduate researchers will find their perfect job immediately upon graduation. And there is no simple equation between gaining master's and PhD qualifications, gaining well paid jobs, and enhancing the capital growth of the nation, though politically it is sometimes claimed that the equation is straightforward. Extrapolating from the economics of one country to another and merely increasing the number of graduates and postdocs to expect national economic growth is potentially over-optimistic and even dangerous. Patterson (2001) looks at the problems of drowning the market with postgraduates:

> ... a kind of gradual academic drift meaning more and more people have to have undergraduate and then postgraduate qualifications (whether relevant or not) in order to gain any kind of employment. In contrast to this, graduates of all levels need to recognise the value of the skills they have developed and how they can transfer these directly into work. (Patterson, 2001, p. 12)

However, there are many transferable skills developed through undertaking research, while other achievements from gaining these skills and achieving the qualification should not be underestimated, and include a greater sense of confidence and self-worth. Nerad and Cerny (1999) asked open-ended questions about the perceived value of doctoral programmes to those who emerge from them. Graduates identify skills:

> By professionalization, these ex-graduate students referred not only to being taught how to publish and acquire professional visibility, but to learning teamwork, collaboration and organizational and managerial skills, all of which they subsequently needed, whether inside or outside the teaching profession.   (Patterson, 2001, pp. 12–13)

Students sum up their feeling about the English PhD being a preparation for work:

> Do not enter this field unless you feel you would never be happy doing anything else. You should have as strong a sense of vocation as one entering the ministry because the sacrifices required for teaching in this field are as great as those required of a pastor. You will have no time to call your own and you will never be paid what you are worth. (Patterson, 2001, pp. 12–13)

Judy Newman (2001) argues most philosophically about the real need for research and higher learning not just for the market place, nor for a job. Studies, she says, need to be seen as of value in themselves, not merely as an investment for a future career or a tool of sponsors and employers. Newman and Patterson deal realistically, perhaps cynically, certainly philosophically, with issues about the focus, usefulness and outcomes of the research process. Students should be enabled to reflect on the skills they have developed as results of research, to recognise these, use them in future employment and also to enhance their quality of life. Publications, a good CV and a personal or professional portfolio can all help students explore and evidence other achievements than the postgraduate qualification in itself, and as supervisors, we should play a part in this recognition and evidencing.

Students themselves are aware of what they have gained, and how the research achievement has helped develop them as learners. From our ongoing research in the 'parallel project' funded latterly by my National Teaching Fellowship, we asked about achievement and the changes it made in working and personal life, and many responses emerged about identity. One postdoctoral colleague comments:

> I really think that I have developed as a learner from this PhD process in the sense that I think things through and in the sense I think that I have developed ways of how to think and how to write and how to be a good researcher. The most important thing for this intellectual experience, it's really a trigger to continue, and every time I have this dream that when I finish my PhD I'm going to carry out more significant research. I feel even more motivated to go on and research things and I am more critical about things and when I attend a lecture or when I read something I read it with a deeper understanding of its contribution to knowledge, its structure and its significance. I now have a conclusive desire to research the issue more and publish and to write more and this PhD has been a stepping stone for me in this way.   (Interview with postdoctoral colleague, 2003)

Another says:

> It was a very hard slog, but while I was studying I had an imaginative life, and a kind of focus on providing something worthwhile which ran for me alongside all I did at work, at home, crises and sickness. It was like becoming another person, working towards something useful. I really changed as a learner, now I always question the conceptual and theoretical bases of all I hear and read and do – and I am more confident as a person. I *know* I can come up with a good idea, systematically discover, test and then analyse and draw conclusions – I can manage my time too. And I *know* I can finish off something, a project of worth.   (Interview with postdoctoral colleague, 2003)

Skills

Increasingly, research and postgraduate study as well as undergraduate study are being undertaken with a very direct view to skills development and employability. If you and your student completed the earlier skills audit, you might like to return to it at this stage. You could review development, reflect on skills and attitudes learned, and what else has been character-building, could lead to employability, and could go on the CV or in a personal development portfolio (PDP), should PDPs be brought in for postgraduates as they are in the UK for undergraduates (by 2006).

Australian colleagues identify ways in which research development programmes can encourage and enable postgraduate students to develop and be aware of their research-related skills:

> The move to more explicit skills formation in 'research training' has come from a number of stakeholders. Industry and employer groups have been calling for a broader skill set for research and related employment in industry. Some students are looking for career preparation in an increasingly fluid job market. Within academia, there is concern that research education has become too narrow and concerned with producing research results at the risk of limiting the educational function. This is seen to be more likely where students are being used to carry out funded research work on grants of various kinds, including commercial projects.
> (Cullen et al., 1994; La Pidus, 1997)

A recent piece of research conducted with PhD graduates at LSE (London School of Economics) with collaboration between the Universities of Cambridge, Oxford and University College London, used an online survey of PhDs who became academics, and eight follow-up, in-depth interviews (Nuernberg and Thompson, 2011). Broadly, the postdocs said that they had gained many skills but not all they needed for academic employment, and that further opportunities to develop teaching skills and opportunities would be of great benefit. Not all made the most of their academic research career paths immediately and attained the jobs they sought, but clearly tenacity and breadth of vision were important in supporting their career developments over time. The report found important attributes were 'personal attributes: dedication and a passion for the job; resilience in the face of a tough job market; confidence in the face of criticism; tolerance in the face of heavy demands especially in the early stages of a career'. Their recommendations could be most useful for your students too – although they might differ somewhat for the sciences and arts/humanities.

Recommendations for PhD students considering an academic career in the social sciences

1 Be clear about what you want and explore your motivations
2 If you are unsure about pursuing an academic career, consider the alternatives
3 If you are clear that academia is the place where you want to be, consider the following frustrations and pressures

> Embarking on an academic career also means: finding one's way through a competitive and inflexible job market; living with the uncertainty of temporary contracts or part-time employment; balancing teaching and research; living up to the pressures resulting from the RAE/REF; facing meagre financial rewards for relatively long periods; and having to reconcile commitments to partners and families with a certain obligation to be mobile.
>
> 4   Don't just have a plan, have an action plan and sharpen your profile
> 5   Become savvy on the academic landscape as a job market
>
> This involves consulting the supervisor, careers colleagues, the implications of the RAE/REF and considering the market abroad.
>
> 6   Find a way of networking that suits you
> 7   As you prepare for the job search, decide about your priorities and the sacrifices you are willing or not willing to make
>
> They mention the shock of moving into a lecturing role, the mobility for career and being flexible, as well as recognising that luck plays a part.
>
> 8   Develop patience, resilience and confidence.
>
> (Nuernberg and Thompson, 2011)

These very useful pieces of generic advice about attitude can be added to the kinds of skills postgraduates are likely to develop through undertaking and completing their master's or doctorate. Versions of these appear below.

Recognising research-related graduate and postgraduate skills
The list of possible skills developed during research includes:

- Questioning givens, formulating questions to ask of situations, problems, innovations
- Searching and finding varieties of information and concepts
- Documenting, cataloguing, storing and managing varieties of information and concepts
- Managing people, time, space, completing and finishing, dealing with and overcoming difficulties

- Developing an enquiring, problem-solving, problematising, investigative mindset – and the strategies that enable this to be actioned
- Identifying problems, needs, issues and questions that interest you in areas in need of research – identifying gaps in knowledge and significant subjects for study
- Forming a broad 'nosiness' or fascination into succinct and focused, manageable questions that have boundaries to them – not asking everything and becoming confused as a result
- Finding out of whom to ask questions, where to find information, how to go about discovering who and what to contact, where to look
- How to forage; pursue questions and leads; find information against odds; access library and journal internet information; sample people; access discussion lists; acquire, sift, engage, store and then begin to use information and arguments
- How to analyse; synthesise; summarise; problematise; argue and get in a dialogue with experts, using their work in a dialogue with your own, contributing to debates furthering or deepening the field
- Working tirelessly against a variety of odds from poor pay to bad light; lack of heat; intrusions; difficulties with data acquisition and management; disasters; difficult supervisory relationships; the absence of supervisor support; isolation from friends, family, peers; pressure; being considered self-indulgent because you are pursuing something esoteric (or so it seems to others); irritating colleagues who feel a bit guilty that they aren't researching themselves
- ICT skills – computing data analysis of all sorts
- Communication – with others, for example, supervisors, examiners, the public, information source owners, your sample, the field
  Method-specific skills such as:
  - interviewing, managing tape recorders and transcribing
  - devising, distributing, analysing and drawing conclusions from questionnaires
  - documentary analysis, close reading and selection
  - experimental techniques
  - the ability to make and present a case to others, both written and, for postgraduate PhD, orally.

All of these and more are graduate and postgraduate skills specifically developed as a result of being involved in research. Probably the most important ones are the lifelong learning skills of having an enquiring mind, a problematising and problem-solving, innovative approach and an ability to devise, manage and carry out a research project to completion.

Students will certainly expect their supervisor to be supportive of their endeavours to enter the job market and to write references for many years.

An Australian industry-oriented view on postgraduate skills, presented in Mullins and Kiley (1998, p. 4 citing Clark, 1996), identifies:

- good communication/presentation skills
- good work practices and collaborative skills
- information technology/computer literacy
- the ability to apply fundamental and technical knowledge to applied systems
- occupational health and safety, and hazard analysis
- good manufacturing practice
- intellectual property management skills
- highly developed skills to adapt to new areas of activity
- a reasonably broad practical knowledge
- familiarity and knowledge of broader literature
- skills in the scientific method and linkage to the broad context
- experimental design, modelling, statistics
- good laboratory practice.

Lists of postgraduate research-related skills are becoming more popular as a way of describing what else other than the thesis is achieved. The broad areas can also be mapped onto undergraduate achievements to differing degrees and tend to range from the general to the particular. Pearson and Brew (2002) comment on what other colleagues produce:

a list of attributes drawn up by the Committee on Science, Engineering and Public Policy (COSEPUP), which is based on views of academics and industry representatives in science and technology fields in the USA. They prize individuals who:

- are educated to think and to solve problems inventively
- are broadly based, rather than narrowly oriented to a specific technology
- can communicate effectively to non-experts as well as peers, both orally and in writing
- understand technology transfer and can develop as well as initiate ideas
- are able to work comfortably in a collaborative group environment, and have respect for the employment milieu and their place within it

These attributes include those that are important for professional lifelong learning, and for adaptability as part of being professional. The COSEPUP attributes also foreground social capabilities such as the ability to communicate, work with others and perform in different work roles. Acceptance of such attributes as desirable outcomes demands a holistic approach to defining the curriculum of research training, one that makes the full range of desired outcomes explicit, and integrates the acquisition of the relevant skills and capabilities with the research process itself.   (Pearson and Brew, 2002, p. 138)

Using references and advice from the Careers Advisory Board, surveys of employers, graduate recruitment brochures, application forms and the skills module of PROSPECT (HE) – the computer-assisted guide and system for higher education students – Ralph Coates (2002) lists several key postgraduate skills:

- communication – written, interpersonal, oral
- teamwork
- planning and organising
- problem-solving
- initiative
- adaptability

and other skills – numeracy, computer literacy and languages skills.
Finally, each person has a *unique profile of skill and knowledge*.
(Coates, 2002, p. 363)

A crucial part of our work with postgraduate students is to encourage them to develop and achieve, recognise, build on and evidence these skills. The Arts and Humanities Board (AHRB) has several pages of postgraduate skills and learning outcomes on their website. With our students, we could usefully conduct an audit during and at the end of their postgraduate study to build on that conducted early on, for them to become aware of skills and learning outcomes achieved. We could also encourage them to put together a personal development programme file or portfolio to evidence these skills and learning outcomes, which will embed them in their *own* consciousness, aiding meta-learning, and helping them to indicate achievements and abilities to future employers.

The Concordat was developed in 2008 initially, and updated yearly to identify, agree, set out and ensure adherence to clear standards for institutions employing members of research staff so that research staff are properly interviewed, appointed, inducted, supported and developed in their roles. It

sets out expectations about personal and professional development, employee rights and conditions of service, and so acts as a way of ensuring that research staff are propery supported in the careers.

The Concordat's key principles:

1. Recognition of the importance of recruiting, selecting and retaining researchers with the highest potential to achieve excellence in research.
2. Researchers are recognised and valued by their employing organisation as an essential part of their organisation's human resources and a key component of their overall strategy to develop and deliver world-class research.
3. Researchers are equipped and supported to be adaptable and flexible in an increasingly diverse, mobile, global research environment.
4. The importance of researchers' personal and career development, and lifelong learning, is clearly recognised and promoted at all stage of their career.
5. Individual researchers share the responsibility for and need to pro-actively engage in their own personal and career development, and life-long learning.
6. Diversity and equality must be promoted in all aspects of the recruitment and career management of researchers.
7. The sector and all stakeholders will undertake regular and collective review of their progress in strengthening the attractiveness and sustain-ability of research careers in the UK.

www.researchconcordat.ac.uk

Universities often also spell out the skills that a student will aim to develop-through undertaking their research and these often include a mix of:

- Research skills and techniques
- Ability to work in the research environment
- Research management skills, including financial management, planning and design
- Personal effectiveness
- Communication skills – to a variety of audiences in a variety of contexts
- Networking and team-working
- Career management, networking and career planning.

In terms of research at both undergraduate and postgraduate levels, students could have developed skills and attitudes related to:

- critical and conceptual thinking
- scoping – identifying a problem/issue/need and the project-planning to approach it
- project-planning
- carrying out a project or mini-projects through to completion
- time management
- knowledge identification, searching, retrieval, transfer, management
- knowledge creation
- presentation skills
- writing for different audiences and different outcomes
- negotiating and managing funding
- coping with disasters, for example, experiments failing.

Skills identification, reflection, evidencing and transfer could be carried out at any depth or scope. Most recent work on skills, by Vitae, develops these further (www.vitae.ac.uk).

Our own research in the NTFS Doctoral Learning Journeys project focused on conceptual threshold crossing, which evidences the development of a range of conceptual, critical, creative skills and orientations. These should enable transformed ways of thinking, learning, acting, and using skills, knowledge and values. Our work highlighted the relationships between ontology – being in the world, a sense of academic identity and role as researcher as part of the overall sense of and position of self in the world – and epistemology – the creation of knowledge, the ways in which the student thinks, works, creates, shares, constructs. With this in mind, an activity which involves both skills for knowledge creation and use, attitude, and orientations, i.e. epistemology and ontology, could usefully help focus students on their usefulness and applicability, and their attitudes and mindsets.

▶ **Activity with students**

These skills sets and personal attitudes need to be considered, clarified, thought through and owned in practice by students. This is useful for a reflective check about the benefits of carrying out research and completing a project, for preparing a letter seeking employment, and at interview.

One activity you might try with students is to take one of the skills lists or adapt one. Ask them to:

1   consider the skills they feel they have developed,
2   and where and how they developed the skills,

3   evidence these with examples – telling the story of the achievement in action with examples,
4   think ahead to how they might use this in the job for which they are applying.

This can then be continued further by asking:

5   beyond the skills, what personal attributes and mindsets have developed?

Some of (5) is embedded in the research from colleagues at LSE, etc. (Nuernberg and Thompson, 2011).

The match of skills developed on the PhD with the expectations and experiences of employers is a topic researched in a very interesting thesis by Karen Adams of the University of Adelaide (2011) where she found that employers were 'reconciling image with innovative need' (2011, ch 6). This suggests a kind of compromise that appreciates the specific skills and the specialist ability; a knowledge of the postdoc achievements without being inappropriately taken in by the expectations implied by the HDR/PhD label – i.e. expectations of graduates and achievements of graduates at this level.

Employers considered many PhDs too focused on problem-solving and their own individual ways of working, which were sometimes seen as 'troublesome' so the fit of employers, postdocs and employment was not straightforward. Perhaps further studies relating postgraduate outcomes, and mapping these against employer expectations and needs, would enhance our understanding of the interaction between research, research degrees and employability.

With the research assessment exercise – now called the REF in the UK – and similar international exercises which gather, measure and value the impact of research outputs, mainly publications but also economic and social engagement activities, students will need to be aware of opportunities to disseminate, and to practise with their peers. One of the first things students need to ensure they do is to share their research in presentations and via publications.

▶ Sharing the research – presentations

Research students need to be encouraged to develop their work for presentation, whether for their own peer group or for major international conferences. For undergraduates and postgraduates alike, the opportunity to

present in front of peers while working on their dissertation or thesis provides a rich opportunity for sharing decisions and ideas, and to question. They can also gain support in solving various problems of appropriateness of methods, data and findings, initiating or maintaining momentum, and managing one's supervisor. Following peer-supported, work-in-progress sessions, students should be encouraged to work together to produce short research conference presentations enabling them to experience preparing work for presentation at more demanding, national and international conferences, for when they complete. The supervisor plays a key role in helping students select appropriate parts of their research and in guiding them through preparation for all kinds of presentation. This support involves encouraging them through the preparatory work up to and through a presentation: from choice of an appropriate element of the research to present, through to managing time, so the audiovisual aids and handouts, etc. are ready. It also involves helping them with organising ideas and the presentation itself; then managing nerves, time, and questions; and adding elements that entertain as well as inform their audience.

There are many opportunities for students to share their work in mini-presentations before completion (see Chapter 10), forming both a key part of development of ongoing work, and a contribution to the academic community, in turn supporting students. They might seek to present at:

- work-in-progress seminars
- in-house seminars and presentations with colleagues
- conferences.

Research is a contribution to knowledge and ideas in the subject(s). Sharing work in progress and after completion helps researchers to clarify, control and evaluate the continuation and significance of their research. It also contributes to the academic community, and shares and builds knowledge. Specifically for the student, presentations enable them to seek analytical responses from others and develop work after highlighting faults and achievements.

Students might be apprehensive about public evaluation, but with support can be advised on, respond to, seek, reflect on and use all kinds of feedback. Students will also find that attending the presentations of others enables them to stand back from their own work, to advise, reflect and develop. Sharing their work in a research community should be seen not as 'giving it away' but as supportive, analytical critique for constructive purposes.

Conference presentations

There are several opportunities to present at conferences, and students might think of starting with a poster and leading up to a whole paper in a symposium.

Kinds of presentation

- whole paper presentation
- paper in a symposium – synergy
- round table
- running a seminar/workshop consisting of an open paper, followed by questions and prompts
- poster presentation.

Advise students of the need to:

- define the area of research they wish to share and explore
- clarify the questions this addresses
- contextualise research in other work in the field, topical developments, their previous work
- clarify research strategies and methods used in structuring and directing this research
- define and clarify investigations, questions and findings
- organise information and arguments into a presentation format
- consider time management: for planning and writing, and for the actual presentation – avoid overrunning.

Consider the four Ps:

- **Plan** – who do they want to present to, when, why, what are their interests?
- **Prepare** – decide on a title, a coherent part of the work to present for this audience/conference, carry out any other necessary research (limit this), involve necessary colleagues, organise and write the paper, put headings on cards/OHTS/PowerPoint slides, produce handouts, organise AVA, start with an interesting opening
- **Practise** – with a friend or family member – avoid irritating habits, use eye contact, manage the time, memorise opening and closing, manage stress
- **Present**.

This should help students identify elements of their work to present and to decide the scope of the research work to date, ready for presentation. Then they need to think of organising the actual paper or presentation itself. Extensive advice appears in Wisker (2007).

Preparing papers for presentation and organising the talk

- There are two main ways to organise:
  - (a) produce an outline and headings, then fill in with information
  - (b) produce a full paper, with headings, then extract headings
- you need a more or less full (but not necessarily finished) text
- you need some elegant phrasing (for the introduction and conclusion – memorise these)
- you need a shorter form you can talk to – because you will probably be unable to read the whole paper out (and this is usually inadvisable because it would be written, not spoken, language and could be dense and wooden!)
  - a written text is not in presentation format
  - you can ensure more complex parts of your presentation are delivered through handouts
  - spoken language is much simpler and more accessible than written language; audiences find it difficult to follow the complexity of written prose when read out rapidly in a presentation
- organise points under headings, starting with an introduction and selecting main points
- decide how to structure your presentation: what will come first, what follows, arguments and ideas, where to place PowerPoint slides, charts and handouts, where to show slides, video clips or music, etc.
- organise charts, slides, video clips, handouts and PowerPoint slides as necessary
- separate points on index cards, bold in a large font on paper, collate main parts (not too many!) separately on PowerPoints
- produce materials carefully.

Remember. six PowerPoints are adequate for a 20- to 30-minute presentation and *one* might do.

- don't overwhelm the audience with information and PowerPoints!
- don't put vast amounts of unrelated data up on a PowerPoint – keep it straightforward, selected and focused.

You could discuss with your students which elements of their work would be suitable for which local, national or international presentation. Help them to decide what is topical, what can be extracted and shaped from their work, and how to organise it in terms of a talk backed up and aided by PowerPoints and handouts to aid audience accessibility. Students need to produce hand-outs for summaries and any extended information, so an exercise developing a visible handout for some of the work could be useful preparation.

PowerPoint *can* really create excellent visuals – but can also be boring and mechanical. PowerPoint backups are essential in case of technology failing. Students also need to ensure they have carefully prepared what they are going to say and how they are going to say it. They need a good, clear script for presentations. You should discuss this with them and if possible help them rehearse or advise them to rehearse with a friend or colleague, and to time themselves. To be absolutely on top of their work they probably need to memorise the opening and closing paragraphs and to commit to memory the key points of the talk. I advise students (and myself) to develop a 14-point bold annotated version of a talk highlighting key points, noting in the margins where the PowerPoint or handouts appear. Some prefer to put this on index cards, others to keep it on A4 sheets. They will, additionally, need large copies of all PowerPoints and handouts, placed in the order they appear in the presentation. Students should practise to avoid irritating habits and to keep good eye contact, pace, time, and if possible, to be interactive.

▶ Supporting students in getting their work published

For PhD students, publishing should be part of their *ongoing* research process, even before they complete. An important element of being part of the research community is getting the research actually out there in dialogue with others in the field. To this end, students should be encouraged to publish. For undergraduates this might be too daunting. However, they can be encouraged to write up their work jointly with others working in similar areas, or to write up for internal dissemination among the student group. Some undergraduate dissertations are worthy of publication because of their contribution to knowledge and originality, while others form the basis for

later postgraduate work and publications in a variety of outlets, ranging from Students' Union newspapers to academic journals and books.

Postgraduates should be encouraged to begin to write for publication as soon as they have completed substantial work that can make a contribution to the field. They will need guidance in the selection of appropriate work from their research area as a whole. They also need to learn to balance the demands of writing for specific publications that have their own agendas and formats, with the actual research process and writing up, so they do not become sidetracked in an unhelpful manner. An expanded version of these short tips appears in Wisker (2007). You might find it useful to go through the tips with your students; identify suitable work to publish; seek publication outlets; encourage them to write, edit and submit; and take some of their work through to publication.

Stages of getting published

Students need to be clear about what they want published and where. For some research students publication is essential as part of the completion of the PhD PrD or EdD, and in Sweden four published essays/articles are required as part of the submitted thesis. Others will find that getting published produces increased confidence because of the recognition of their peers in the reviewing process, and others might find it prevents them from focusing on the main core of their research. However, all need to publish once they have completed so that the work can be read and used by others. Suggest that students:

*   **Identify what to write**. Their favourite subject might not be topical/interesting to others. They could refocus for specific publication outlets, find another topic, respond to calls for papers or identify a journal. Once a journal is identified they need to read the journal guidelines and previous essays, then organise the overall essay, title, tone, presentation, and focus to suit this journal. Many journals now put their publication guidelines and sample text online. It is also useful to use Google Scholar or the Web of Science or Web of Knowledge online to explore the standing and impact factor of any journal to which they intend to submit. While it is important to get published in a journal with a high impact factor (widely read, significant, cited by others important in the field), sometimes aiming right at the top will lead to serial rejection. Sometimes it is a good idea to submit to a local inhouse journal or an online journal first, or to ask others about which of the journals have some standing in the field, and work with their authors to develop the text ready to be published.

- **Write and send**.   Students should contact editors to discuss propos-
  als, send in abstracts, and negotiate the likelihood of publication.
  Next, they send the perfectly presented paper to the journal – probably
  two hard copies, on disk, or more likely by email attachment and, in
  many instances, uploading the work to Scholar One or Manuscript
  Central, depending on the publication, and then email and await: (i)
  the editor's response; (ii) the referees' response, (iii) requests to
  rewrite. They then rewrite where indicated and resubmit (there may be
  a couple of iterations of this), explaining how they have taken on
  board the comments of the referees (or, if really confident, how they
  have taken some on board and don't find others quite fully appreciate
  the article and the research – so query them) then copy-edit and proof
  before publication.

Publishing is not like handing in work. Students can be totally rejected, and
have to deal with upsetting or obscure, conflicting comments. To get
published, they need to develop a thick skin, an eye for how and where to
pitch an essay, how to turn critical comments into helpful feedback, and
remarkable stubborn tenacity in order to *finally* get the essay published,
perhaps in a different form, perhaps in a different journal, but out there. Then
they can tell people to look out for their publications, and let future editors
know of their publication record.

Task

Together with your student, discuss:

- identifying useful ideas about working toward publication
- how your student can make the best of sharing information, skills, peer
  support and networking – editing, refereeing
- which elements of their work they could usefully develop now to publi-
  cation
- what they would need to do to their current work in order to carry out
  the writing
- where they might send it, and why
- whether you could publish together and why that might be a good
  idea
- an example of a journal they might write for and its format, layout,
  tone and preferences for kinds of essays.

Draft outline and elements of a book proposal

You might find it useful to talk with your students about turning their research, particularly postgraduate PhD work, into a book, although PhD theses usually need a lot of work *before* they become books. There are some publishers who will cold call a postdoc student to try to publish their thesis as a book. If this happens it is a good idea to check the standing of the publisher, how much work you need to do/your student needs to do to get it into publication, and whether there is any cost involved.

Many PhDs get their first book out this way, and quickly, and it goes into libraries rather than selling large numbers. However, the Internet means that others can see their book has been published and could order a copy – these 'hard copy only' presses will still turn up in a search engine, so the student's work will not be hidden, although it won't be marketed as it would be with a large publishing house. They will need to consider:

1   the shape of the proposal
2   the right kind of publisher
3   preparing work for publication
4   coping with responses.

Typical proposal shape
- **Introduction** – outlining main area of argument and interest in the book
  - accessible in style
  - containing main arguments, conceptual points and discourse.

- **Rationale and audience** (can be separate)
  - Explain why this is topical and interesting. What kinds of readers might it expect? (be as full as possible and relevant)
  - Why is it worth doing right now? What will it contribute to the field of knowledge and ideas?

- **Market** – carry out market research
  - What other books and articles are out there? Are these on this topic? Identify, list and evaluate.
  - Detail why your work is different, how it adds to theirs or improves on it.
  - Who might read it?

- **Draft chapters and contents**
  - Include draft contents page, outlining chapters.

- – Information on chapter topics and arguments, some of the work referred to.
- – Include a draft chapter. This can be the introduction, more usually a later chapter.

- **Timing and length**
  - – Give a realistic date for its completion and a realistic length.
  - – Ensure it all looks marvellous.
  - – Add a short letter, mention previous work, and contacts where appropriate.

The next step

If students hear nothing they should chase, refine outlines in response to publishers' suggestions *or* resubmit elsewhere. It is rarely a good idea to write a whole book before getting a contract, or the work could be wasted. However, publishers' readers often want to see a chapter, which the student can see as an investment towards the book, or a future journal essay if the book fails to be commissioned. Reasons for proposals being turned down differ, including the quality of conceptualisation or presentation, competing books, or simply that it is inappropriate for this publisher's list. Students need to do market research, be honest about the competition and state why *their* book contributes something new, topical, is bound to sell and is necessary to the field (rather like research).

If and when they find a publisher, they are advised to read all the small print and check on advances and obligations (will they have to pay if it goes over-length, or is pulped after a few months?). They need to enquire about how it will be marketed (no point spending a year of your life perfecting a great contribution to knowledge if it sits in a warehouse, no one knows of it and shops don't stock it).

Writing

Your student could usefully follow the good writing guidelines earlier in this book, and advice in the suggested further reading. A book is a wonderful achievement, and a real milestone. Authors need to be perfectionist completer-finishers to get out a book of sufficiently good quality. They will need to:

- rearrange time, seek support, develop a critical eye for their own writing
- edit, edit, edit
- ensure layout and presentation are visually attractive, appropriate, consistent
- proofread fastidiously (obsessively) and ask others to do so too

- ask a critical friend to check the 'final' text
- learn to respond well and constructively to criticism, refining the book until it is ready to send off
- keep in touch with the editor
- send off hard copy, disk; email copies and keep backups
- be prepared to rewrite until *their* critical processes are complete
- when it has gone to the publisher it will return for copy-editing, proofing and indexing, as well as agreements about blurbs, jackets, who to send copies to, and where to publicise. This part is fun and it is crucial to get it right.

▶ **Conclusion**

Outcomes of research and beyond

Newman (2001) usefully generalises about the importance of research and learning for individuals and society:

> Two facts need to be kept in view. Firstly, society can never have too many people who have learned the importance of the search and the respect for truth. As James Armstrong recently argued, society needs people who have learned to take part in critical discourse and to make appropriate judgments, who have developed a sense of the ethics of inquiry and the responsibilities involved, who can see possibilities beyond the immediate status quo, who know that they will go on learning throughout their lifetimes, and who have learned to cope with failure. (In any successful doctorate there are many lines of inquiry which fail to produce results.) Society needs more people trained at the highest levels of critical thinking, not less.   (Newman, 2001, pp. 16–17)

Funding education and research might be seen as a kind of social gift to other people's children, and intellectually based 'work' as entertainment, a privilege. Of course education is a privilege – and a *right*, if used as a key to more than a pay packet. Educational research can enhance social health, the development of knowledge, the ability to recognise the questionable, the relative nature of values, decisions and knowledge *and* the importance of informed decision-making. Research and education should help us move beyond blinkered stubborn ignorance – it is not for selfish self-development, but for both individual growth and human good. Getting research out there through dissemination, publication, and being used in life and employment ensures it can have an effect on society, social justice and knowledge creation.

▶ **Further reading**

Åkerlind, G. S. (2008) 'Growing and Developing as a University Researcher, *Higher Education: The International Journal of Higher Education and Educational Planning*, 55(2) (Feb. 2008), 241–54.

Åkerlind, G. S. and McAlpine, L. (in press) 'Rethinking Preparation for Academic Careers', in L. McAlpine and G. S. Åkerlind (eds), *Becoming an Academic: International Perspectives* (Basingstoke: Palgrave Macmillan), Ch. 7.

Clark, J. (1996) 'Postgraduate Skills: A View from Industry'. Paper presented to the Deans of Graduate Study, Sydney.

Coates, R. (2002) 'Career Opportunities', in T. Greenfield (ed.), *Research Methods for Postgraduates* (London: Hodder & Stoughton Educational), p. 363.

McAlpine, L. and Åkerlind, G. S. (in press) *Academic Practice in a Changing International Landscape*, in L. McAlpine and G. S. Åkerlind (eds), *Becoming an Academic: International Perspectives* (Basingstoke: Palgrave Macmillan), ch.1.

Mullins, M. and Kiley, M. (1998) 'Quality in Postgraduate Education: The Changing Agenda', in M. Kiley and G. Mullins (eds), *Quality in Postgraduate Education: Managing the New Agenda* (Adelaide: Advisory Centre for University Education), pp. 1–14.

Nerad, M. and Cerny, J. (1999) 'From Rumors to Facts: Career Outcomes of English PhDs Results from the PhDs – Ten Years Later Study', *Communicator*, 32(7), 1–11.

Newman, J. (2001) 'The Shape of Graduate Studies in English', *Issues in English: Doctor! Doctor! Doctoral Studies in English in Twenty-first Century Britain*, 1, pp. 15–24.

Nuernberg C. and Thompson, R. (2011) 'Academic career paths of social science PhD graduates', at: www.apprise.ox.ac.uk/downloads/pdf/report_academic_career_paths.pdf

Vitae: www.vitae.ac.uk/researchers/156431-376411/The-Guardian-discusses-Life-after-a-PhD.html

References

Acker, S., Hills, T. and Black, E. (1994) 'Thesis supervision in the social sciences: Managed or negotiated?' *Higher Education*, 28, 483–98.

Adam, T. (1995) 'Internationalizing the university: An Australian case study', *Higher Education Policy*, 8(2), 40–3.

Adams, A. (1986) *Bullying at Work* (London: Virago).

Adams, J. and DeFleur, M. (2005) 'The acceptability of a doctoral degree earned online as a credential for obtaining a faculty position', *American Journal of Distance Education*, 19(2), 71–85.

Aitchison, C. (2009) 'Writing groups for doctoral education', *Studies in Higher Education*, 34(8), 905–16.

Åkerlind, G. S. (2008) 'Growing and developing as a university researcher', *Higher Education: The International Journal of Higher Education and Educational Planning*, 55(2) (February), 241–54.

Åkerlind, G. S. and McAlpine, L. (in press) 'Rethinking preparation for academic careers', Chapter 7 in L. McAlpine and G. S. Åkerlind (eds), *Becoming an Academic: International Perspectives* (Basingstoke: Palgrave Macmillan).

Allen, C. M., Smyth, E. M. and Wahlstrom, M. (2002) 'Responding to the field and to the academy: Ontario's evolving PhD', *Higher Education Research and Development*, 21(2), 203–13.

Amabile, T. (1988) 'A model of creativity and innovation in organizations', *Research in Organizational Behaviour*, 10, 123–67.

Anderson, G., Boud, D. and Sampson, J. (1996) *Learning Contracts: A Practical Guide* (London: Kogan Page).

Andresen, L. W. (1997) *Highways to Postgraduate Supervision* (Sydney: University of Western Sydney Press), p. 48.

Anglia Ruskin University (2003) *PrD Handbook*, pp. 1–2.

Antoniou, M. and Moriarty, J. (2008) 'What can academic writers learn from creative writers? Developing guidance and support for lecturers in Higher Education', *Teaching in Higher Education*, 13(2) 157–67.

Armitage, A. (2008) 'Power relationships and postgraduate supervision', *Journal of Quality, Chartered Quality Institute*, 1 December, at: www.thecqi.org/Knowledge-Hub/Resources/Journal-of-Quality/Past-articles/Power-relationships-and-postgraduate-supervision/

Artemi, S., Chromy, S., Martin, V., Speedy, J., Trahar, S., Williams, S. and Wilson, S. (2008) 'Friend and foe? Technology in a collaborative writing group', *Qualitative Inquiry* 14(7): 1205–22.

Asmar, C. and Peseta, T. (2001) 'Figuring things out from my friends: Encouraging collaboration among first-year students at undergraduate and postgraduate level', Institute for Teaching and Learning, University of Sydney, Australian Association for Research in Education conference, Fremantle, 2–6 December 2001.

Aspland, T., Hill, G. and Chapman, H. (2002) 'Journeying postgraduate supervision', a website production for Queensland University of Technology.

Aspland, T. and O'Donoghue, T. (1994) 'Quality in supervising overseas students', in O. Zuber-Skerritt and Y. Ryan (eds), *Quality in Postgraduate Education* (London: Kogan Page).

Awesome Website, University of Leeds, http://awesome.leeds.ac.uk/

Bakhtin, M. (1981) *The Dialogic Imagination*, trans. C. Emerson and M. Holquis (Austin and London: University of Texas Press) (Original work published 1975).

Ballard, B. (1991) 'Helping students from non-English speaking backgrounds to learn effectively', occasional paper, Educational Research and Development Unit (Melbourne, Australia: Royal Melbourne Institute of Technology).

Ballard, B. and Clanchy, J. (1984) *Study Abroad: Manual for Asian Students* (Kuala Lumpur: Longman).

Barbalet, J. (1998) *Emotion, Social Theory and Social Structure* (Cambridge: Cambridge University Press).

Bargar, R. and Duncan, J. (1982) 'Cultivating creative endeavour', *Doctoral Journal of Higher Education*, 53(1), 1–31.

Barnett, J. (2002) 'Writing to research: A supervisor's perspective', in M. Kiley and G. Mullins (eds), *Quality in Postgraduate Research: Integrating Perspectives* (Canberra: University of Canberra).

Bartlett, A., May, M. and Holzknecht, S. (1994) 'Discipline-specific academic skills at postgraduate level: A model', in K. Chanock (ed.), *Integrating the Teaching of Academic Discourse into Courses in the Disciplines* (Melbourne: Language and Academic Skills Units of La Trobe University), pp. 284–7.

Bartlett, A. and Mercer, G. (2000) 'Reconceptualising discourses of power in postgraduate pedagogies', *Teaching in Higher Education*, 5(2), 195–204.

Basch, R. and Bates, M. E. (2000) *Researching Online for Dummies* (Foster City, CA: IDG Books).

Beasley, C. J. (1990) 'Content-based language instruction: Helping ESL/ELF students with foreign language and study skills at tertiary level', *TESOL in Context*, 1, 10–14.

Becher, T. (1993) 'Graduate education in Britain: The view from the ground', in B. R. Clark (ed.), *The Research Foundations of Graduate Education: Germany,*

Britain, France, United States, Japan (Berkeley, CA: University of California Press), pp. 115–53.

Becher, T. (1994) 'The significance of disciplinary differences', *Studies in Higher Education*, 19(2), 151–61.

Becher, T., Henkel, M. and Kogan, M. (1994) *Graduate Education in Britain* (London: Jessica Kingsley).

Becker, H. (1970) *Sociological Work* (New Brunswick, NJ: Transaction Books).

Bell, R. (2009) 'Learning to write: Writing to learn: Academic writing: A literature review', Learn Higher Academic Writing CETL, Nottingham Trent University, at: www.learnhigher.ac.uk/learningareas/academicwriting/home.htm

Berne, E. (1964) *Games People Play: The Psychology of Human Relationships* (New York: Ballantine).

Biggs, J. B. (1978) 'Individual and group differences in study processes and the quality of learning outcomes', *Higher Education*, 48, 266–79.

Biggs, J. B. (ed.) (1991) *Teaching for Learning: The View from Cognitive Psychology* (Hawthorn, Vic: ACER).

Biggs, J. (1992) 'The paradox of the Chinese learner', Fourth Asian Regional Congress of Cross-Cultural Psychology, Kathmandu, Nepal, and later published in 'Approaches to learning of Asian students: A multiple paradox', in J. Pandy, D. Sinha, and P. S. Bhawuk (eds) (1996), *Asian Contributions to Cross-Cultural Psychology* (New Delhi: Sage), pp. 180–99.

Biggs, J. (2003) *Teaching for Quality Learning at University* (Maidenhead: Open University Press).

Biggs, J. and Collis, K. (1991) 'Multimodal learning and the quality of intelligent behaviour', in H. Rowe (ed.), *Intelligence, Reconceptualization and Measurement* (Hillsdale, NJ: Laurence Erlbaum).

Biggs, M. and Buchler, D. (2008) 'Eight criteria for practice-based research in the creative and cultural industries', *Art, Design and Communication in Higher Education*, 7(1), 5–17.

Blanton, J. (1983) 'Midwifing the dissertation', *Teaching of Psychology*, 10(2).

Bloor, M. and Bloor, T. (1991) 'Cultural expectations and socio-pragmatic failure in academic writing', in P. Adams, B. Heaton and P. Howarth (eds), *Socio-Cultural Issues in English for Academic Purposes* (Basingstoke: Macmillan), pp. 1–12.

Blume, S. (1986) 'The development of current dilemmas of postgraduate education', *European Journal of Education*, 21(3), 217–22.

Bochner, D., Gibbs, G. and Wisker, G. (1995) *Supporting More Students, Teaching More Students*, 6 (Oxford: Oxford Centre for Staff Development, Oxford Brookes University).

Boehmer, E. (1995) *Colonial and Postcolonial Literature: Migrant Metaphors* (Oxford: Oxford University Press).

Boice, R. (1990) *Professors as Writers: A Self-Help Guide to Productive Writing* (Stillwater, OK: New Forums).

Boud, D. (1995) *Enhancing Learning Through Self-Assessment* (London: Kogan Page).

Boud, D., Cohen, R. and Walker, D. (1993) 'Using experience for learning', *Issues of Teaching and Learning*, 3(2), 7–9.

Boud, D., Keogh, R. and Walker, D. (eds) (1985) *Reflection: Turning Experience into Learning* (London: Kogan Page).

Boud, D., and Tennant, M. (2006) 'Putting doctoral education to work: Challenges to academic practices', *Higher Education Research and Development*, 25, 293–306.

Bourke, S., Holbrook, A., Fairbairn, H. and Lovat, T. (2008) 'Consistency and inconsistency in PhD thesis examination', *Australian Journal of Education*, 52(1), 35–47.

Bourner, T., Reynolds, A., Hamed, M., and Barnett, R. (1991) 'Part-time students and their experience of higher education', (Buckingham: SHRE and Open University) Press, at: www.informaworld.com/smpp/title~content=t71342 3834

Brew, A. (2000a) 'Bringing research and teaching together strategically', poster presented at the 8th International Symposium on Improving Student Learning.

Brew, A. (2000b) 'Taking research seriously: The role of inquiry in staff and educational development', keynote presentation to the SEDA conference, November.

Brew, A. (2001) *The Nature of Research: Inquiry in Academic Contexts* (London: Routledge Falmer).

Brew, A. and Peseta, T. (2002) *Improving Research Higher Degree Supervision through Recognising and Rewarding Supervision Development* (Sydney, Australia: University of Sydney).

Brew, A. and Peseta, T. (2004) 'Changing postgraduate supervision practice', *Innovations in Education and Teaching International*, 41(1), 5–22.

Brook, J., Catlin, S., DeLuca, C., Doe, C., Huntly, A. and Searle, M. (2010) 'Conceptions of doctoral education: The PhD as pathmaking', *Reflective Practice: International and Multidisciplinary Perspectives*, 11(5), Queen's University, Kingston, ON, Canada, 657–68.

Brookfield, S. D. (1986) *Understanding and Facilitating Adult Learning: Comprehensive Analysis of Principles and Effective Practices* (Milton Keynes: Open University Press).

Brown, G. (2006) 'Degrees of doubt: Legitimate, real and fake qualifications in a global market', *Journal of Higher Education Policy and Management*, 28(1), 71–9.

Brown, G. and Atkins, M. (1988) *Effective Teaching in Higher Education* (London: Methuen).

Brown, P. (2006) 'The opportunity trap', in H. Lauder et al. (eds), *Education, Globalization and Social Change* (Oxford: Oxford University Press), pp. 381–97.

Brown, P., Lauder, H. and Ashton, D. (2010) *The Global Auction: The Broken Promises of Education, Jobs, and Incomes* (Oxford: Oxford University Press).

Browne, Lord J. of Madingley (2010) 'Securing a sustainable future for higher education: An independent review of higher education funding and student finance', 12 October 2010, at: www.independent.gov.uk/browne-report

Bruce, C. (1994) 'Research students' early experiences of the dissertation literature review', *Studies in Higher Education*, 19(2), 217–29.

Bruner, J. (1986) *Actual Minds, Possible Worlds* (Cambridge, MA: Harvard University Press).

Bryman, A. (1988a) *Quantity and Quality in Social Research* (London: Unwin Hyman).

Bryman, A. (ed.) (1988b) *Doing Research in Organisations* (London: Routledge), pp. 9, 16, 151.

Buchanan, D., Boddy, D. and McCalman, J. (1988) 'Getting in, getting on, getting out and getting back', in A. Bryman (ed.), *Doing Research in Organisations* (London: Routledge), p. 59.

Bulmer, M. (1988) 'Some reflections upon research in organisations', in A. Bryman (ed.), *Doing Research in Organisations* (London: Routledge), p. 151.

Burgess, R. G. (ed.) (1994) *Postgraduate Education and Training in the Social Sciences: Processes and Products* (London: Jessica Kingsley).

Burgess, R., Pole, C. and Hockey, J. (1994) 'Strategies for managing and supervising the social science PhD', in R. Burgess (ed.), *Postgraduate Education and Training in the Social Sciences: Processes and Products* (London: Jessica Kingsley).

Burke, P. J. (2008) 'Writing, power and voice: Access to and participation in higher Education', *Changing English*, 15(2), 199–210.

Burnham, P. (1994) 'Surviving the viva: Unravelling the mysteries of the PhD oral', *Journal of Graduate Education*, 1(1), 30–4.

Butcher, J. and Sieminski, D. (2006) 'The challenge of a distance learning professional doctorate in education', *Open Learning*, 21(1), 59–69.

Caffarella, R. S. and Barnett, B. G. (2000) 'Teaching doctoral students to become scholarly writers: The importance of giving and receiving feedback', *Studies in Higher Education*, 25(1), 3–52.

Cargill, M. (1996) 'An integrated bridging program for international postgraduate students', *Higher Education Research and Development*, 15(2), 177–88.

Carter, B. and Whittaker, K. (2009) 'Examining the British PhD viva: Opening new doors or scarring for life?' *Contemporary Nurse*, 32(1–2), 169–78.

Chen, J. R. (2001) 'The cross cultural adjustment of Taiwanese postgraduate students in England' (unpublished PhD thesis, University of Warwick).

Childs, P. (2005) 'What is an English curriculum?' (electronic version), CCUE News, 19, at: www.ccue.ac.uk/fileadmin/documents/7265_NENE_NEWS_ SUMMER_ 2000.pdf, June 15 2008

Childs, M. and Deane, M. (2009) 'Revised COWL project pedagogic tools report', University of Coventry, pp. 1–13, at: http://cuba.coventry.ac.uk/cowl/ files/2009/06/pedagogic-tools-report-cowlv2.pdf

Churchill, H. and Sanders, T. (2007) *Getting Your PhD – A Practical Insider's Guide* (London: Sage Publications), p. 121.

Clark, B. R. (ed.) (1993) *The Research Foundations of Graduate Education: Germany, Britain, France, United States, Japan* (Berkeley, CA: University of California Press), p. 369.

Clark, J. (1996) 'Postgraduate Skills: A View from Industry', paper presented to the Deans of Graduate Study, Sydney.

Clegg, P. (2008) 'Creativity and critical thinking in the globalised university', *Innovations in Education and Teaching International*, 45(3): 209–26.

CLTAD International Conference, 12–13 April 2010, Berlin creative partnerships: Helping creative writing and visual practice students to make links between their creative processes and their personal, vocational and academic development.

CNNA (1980) *Notes on Guidance for External Examiners for Courses* (London: CNNA).

Coates, R. (2002) 'Career opportunities', in T. Greenfield (ed.), *Research Methods for Postgraduates* (London: Hodder & Stoughton Educational), p. 363.

Cocks, J. (1985) 'Suspicious pleasures: On teaching feminist theory', in M. Culley and C. Portuges (eds), *Gendered Subjects: The Dynamics of Feminist Teaching* (London: Routledge & Kegan Paul), p. 44.

Coe, K., Arend, C. and Frick, L. (2010) 'Lesson study in continuing professional teacher development: A South African case study', *Acta Academica*, 42(4), 206–30.

Coffin, C. and Hewings, A. (2005) 'Engaging electronically: Using CMC to develop students' argumentation skills in higher education', *Language and Education*, 19(1), 32–49.

Conrad, L. (1998) 'Enhancing research through academic staff development', *International Journal for Academic Development*, 3(2), 115–23.

Conrad, L. (1999) 'Contextualising postgraduate supervision to improve quality', in G. Wisker and N. Sutcliffe (eds), *Effectiveness in Postgraduate Supervision* (Birmingham: Staff and Educational Development Association), pp. 13–24.

Coogan, D. (1995) 'E-mail tutoring, a new way to do new work', *Computers and Composition*, 12, 171–81.

Cooke, A. (1999) *A Guide to Finding Quality Information on the Internet: Selection of Evaluation Strategies* (London: Library Association Publishing).

Cooper, H. M. (1985) *The Integrative Research Review: A Systematic Approach* (London: Sage), p. 8.

Cousin, G. (2010) 'Positioning positionality: The reflexive turn', in M. Savin-Baden and C. Howell Major (eds), *New Approaches to Qualitative Research, Wisdom and Uncertainty* (London, Routledge Education).

Creme, P. (2008) 'A space for academic play: Student learning journals as transitional writing', *Arts and Humanities in Higher Education*, 7(1), 49–64.

Cryer, P. (1996) *The Research Student's Guide to Success* (Buckingham: Open University Press).

Cryer, P. (1997) *Handling Common Dilemmas in Supervision: Issues in Postgraduate Supervision, Teaching and Management*, Guide no. 2 (London: Society for Research into Higher Education and The Times Higher Education Supplement).

Cryer, P. and Okorocha, J. (1997) 'Handling common dilemmas in supervision: Issues in postgraduate supervision, teaching and management', Guide no. 2 (London: Society for Research into Higher Education and the *Times Higher Education Supplement*).

Cullen, D., Pearson, M., Saha, L. and Spear, R. (1994) *Establishing Effective PhD Supervision* (Canberra: Australian Government Publishing Service).

Culley, M. and Portuges, C. (eds) (1985) *Gendered Subjects: The Dynamics of Feminist Teaching* (London: Routledge and Kegan Paul).

CVCP (1984) *The External Examiner System for First Degree and Taught Courses* (London: CVCP).

Danvers, J. (2003) 'Towards a radical pedagogy: Provisional notes on learning and teaching in art and design', *International Journal of Art & Design Education*, 22(1), 47–57.

Davies, S., Swinburne, D. and Williams, G. (2006) 'Writing matters: The Royal Literary Fund report on student writing in higher education', The Royal Literary Fund, London.

Davis, H., Evans, T. and Hickey, C. (2006) 'A knowledge based economy landscape: Implications for tertiary education and research training in Australia', *Journal of Higher Education Policy and Management*, 28(3), 231–44.

Deane, M and Brick, B. (2009) 'COWL project pedagogic approaches report', University of Coventry, pp. 1–27, at: http://cuba.coventry.ac.uk/cowl/files/2009/05/pedagogic-approaches-6-5-09.pdf

Dearing, R. (1997) *Higher Education in the Learning Society*, National Committee of Inquiry into Higher Education (London: HMSO).

Delamont, S. (1997) 'Peons or colleagues? Everyday life in graduate school', United Kingdom Council for Graduate Education Summer Conference, Southampton, 16–17 July.

Delamont, S., Atkinson, P. and Parry, O. (1997) *Supervising the PhD: A Guide to Success* (Buckingham: Open University Press), pp. 1, 8–9, 57, 97.

Delamont, S. and Eggleston, J. (1983) *Supervision of Students for Research Degrees* (London: British Educational Research Association).

Delamont, S., Parry, O. and Atkinson, P. (1998) 'Creating a delicate balance: The doctoral supervisor's dilemmas', *Teaching in Higher Education*, 3(2), 157–72.

Denicolo, P. (2004) 'Doctoral supervision of colleagues: Peeling off the veneer of satisfaction and competence', *Studies in Higher Education*, 29(6), 693–707.

Denicolo, P., Boulter, C., Fuller, M., Fisher, J. and Savage, D. (2000) *The Higher Degree Viva: A Case of Constructive Alternativism – Beyond Experimentation into Meaning* (Farnborough: EPCA Publications).

Denicolo, P., Park, C., Bohrer, J. and Clarke, G. (2010) 'Doctorateness: An elusive concept', the QQA, Gloucester, at: www.qaa.ac.uk/standardsand quality/doctoralqualification/doctorateness.pdf (accessed 15 May 2011).

Detith, S. and Ellis, R. J. (2000) 'The public understanding of English studies' (electronic version), CCUE News, 13k, at: www.ccue.ac.uk/fileadmin/docu-ments/7265_NENE_NEWS_SUMMER_2000.pdf, accessed June 15, 2008.

Denzin, N. K. and Lincoln, Y. (2005, 2011) *The SAGE Handbook of Qualitative Research* (London: SAGE Publications).

Denzin, N. K. Lincoln, Y. and Tuhiwai Smith, L. (eds) (2008) *Handbook of Critical and Indigenous Methodologies* (New York: Sage Publications).

Deves, A. (2004) 'The project of self, the project of other: Mentoring, women and the fashioning of the academic subject', *Studies in Continuing Education*, 26(1) (March), 67–80.

Dewey, J. (1934) *Art as Experience* (New York: Capricorn Books).

Dewey, J. (1969) *Moral Principles in Education* (New York: Greenwood Press).

Dillon, P. (2008) 'Pedagogy of connection and boundary crossings: Methodological and epistemological transactions in working across and between disciplines', *Innovations in Education and Teaching International*, 45(3), 255–62.

Dineen, R. and Collins, E. (2004) 'Mind the gap: The promotion of creativity in art and design education', *Enhancing Curricula – Conf*, 2, 249–66

Dineen, R. and Samuel, E. et al. (2005) 'The promotion of creativity in learners: Theory and practice', *Art, Design & Communication*, 4(3), 115–73.

Dingwall, R. (1980a) 'Ethics and ethnography', *Sociological Review*, 28(4), 871–91.

Dingwall, R. (1980b) 'Orchestrated encounters', *Sociology of Health and Illness*, 2(2), 151–73.

Dooley, K. E., Kelsey, K. D. and Lindner, J. R. (2003) 'Doc@Distance: Immersion in advanced study and inquiry', *Quarterly Review of Distance Education*, 4(1), 43–50.

Duffy, P. and Bruns, A. (2006) 'Delivery in the beyond – possibilities for the use of blogs, wikis & RSS in education', paper presented at the Online Learning

and Teaching Conference (September 26th), Brisbane Convention Centre, Queensland, Australia.

Dunleavy, P. (2003) *Authoring a PhD* (Basingstoke: Palgrave Macmillan).

Eaglestone, R. (2000) *Doing English* (London: Routledge).

Eagleton, T. (2000) *The Idea of Culture* (Oxford: Blackwell Publishers).

EAERLI (2003) 'Improving Learning, Fostering Will to Learn', European Association for Research on Learning and Instruction (EARLI) 10th Biennial Conference, Padova, Italy, 26–30 August 2003, University of Padova.

Easterby-Smith, M., Thorpe, R. and Lowe, A. (1991) *Management Research: An Introduction* (London: Sage), p. 64.

Elander, J., Harrington, K., Norton, L., Robinson, H. and Reddy, P. (2006) 'Complex skills and academic writing: A review of evidence about the types of learning required to meet core assessment criteria', *Assessment & Evaluation in Higher Education*, 31(1), 71–90.

Elbow, P. (1973) *Writing without Teachers* (Oxford: Oxford University Press), pp. 3, 8, 10.

Elbow, P. (2002) 'The cultures of literature and composition: What could each learn from the other? *College English*, 64(5), 533–46.

Elbow, P. (2006) 'The music of form: Rethinking organization in writing', *College Composition and Communication*, 57(4), 620–67.

Eley, A. and Jennings, R. (2005) *Effective Postgraduate Supervision: Improving the Student/Supervisor Relationship* (Maidenhead: Open University Press), at: www.mcgraw-hill.co.uk/html/0335217079.html.

Ellsworth, E (1989) 'Why doesn't this feel empowering? Working through the repressive myths of critical pedagogy', *Harvard Educational Review*, 59/3.

Elton, L. (2008) 'Complexity, universities and the arts', *Journal of Writing in Creative Practice*, 1(3), 207.

Emilson, U. and Johnsson, E. (2007) 'Supervision of supervisors: On developing supervision in post-graduate education', *Higher Education Research and Development*, 26(2), 163–79.

Entwistle, N. (1998) 'Improving teaching through research on student learning', in J. J. F. Forest (ed.), *University Teaching: International Perspectives* (New York: Garland Publishing).

Entwistle, N. (2007) 'Research into student learning and university teaching', in N. Entwistle and P. Tomlinson (eds), 'Student learning and university teaching', *British Journal of Educational Psychology*, Monograph Series II, Number 4 (Leicester: British Psychological Society), 1–18.

Entwistle, N. J. and Ramsden, P. (1983) *Understanding Student Learning* (London: Croom Helm).

Eshet-Alkalai, Y. (2004) 'Digital literacy: A conceptual framework for survival skills in the digital era', *Journal of Educational Multimedia and Hypermedia*, 13(1), 93–106.

Eshet-Alkalai (2005) 'Thinking skills in the digital era', in C. Haward, J. V. Bottcher, L. Justice, K. Schenk, P. L. Rogers, G. A. Berg (eds), *Encyclopaedia of Distance Learning*, Vol. I (London: Idea Group Inc.), 1840–5.

Evans, T. (2008) 'Part-time research students: Are they producing knowledge where it counts?' *Higher Education Research & Development*, at: www.inform aworld.com/smpp/title~content=t713423834 (Terry Evans Deakin University, accessed May 2008).

Evans, T. and Green, W. (1995) 'Dancing at a distance? Postgraduate studies, "supervision", and distance education', Australian Association for Research in Education Conference, AARE, Hobart (Electronic), 1–14.

Evans, T., Lawson, A., McWilliam, E., and Taylor, P. (2005) 'Understanding the management of doctoral studies in Australia as risk management', *Studies in Research*, 1, 1–11.

Felix, U. (1993) 'Support strategies for international postgraduate students', *HERDSA News*, 15, 6–8.

Festinger, L. (1957) *A Theory of Cognitive Dissonance* (Evanston, IL: Row Peterson).

Flavell, J. H. (1977) *Cognitive Development* (Englewood Cliffs, NJ: Prentice Hall).

Forte, A. and Bruckman, A. (2007) 'Constructing text: Wiki as a toolkit for (collaborative?) learning', in *Proceedings of the 2007 International Symposium on Wikis* (Montreal, Canada: ACM).

Fowler, H. W. (1994) *A Dictionary of Modern English Usage* (Ware: Wordsworth Editions).

Frame, I. and Allen, L. (2002) 'A flexible approach to PhD research training', *Quality Assurance in Education,* 10(2), 98–103.

Francis, H. (1997) 'The research process', in N. Graves and V. Verma (eds), *Working for a Doctorate: A Guide for the Humanities and Social Services* (London: Routledge), p. 18.

Freckleton, L., Creighton, E. and Wisker, G. (2003) 'Internationalisation of the curriculum and employability', *World Views: The Magazine for UKCOSA Members*, 11, 10–12.

Frick, B. L. (2010) 'Creativity in doctoral education: Conceptualising the original contributiony', in C. Nygaard, N. Courtney and C. W. Holtham (eds), *Teaching Creativity: Creativity in Teaching* (Faringdon: Libri Publishing).

Ganobcsik-Williams, L. (2004) 'A report on the teaching of academic writing in UK higher education', Royal Literary Fund, London.

Ganobcsik-Williams, L. (2009) 'COWL project review of the origins and current practices of online writing labs (OWLs) and online writing support', unpublished report, University of Coventry, at: http://cuba.coventry.ac.uk/cowl/files/2009/03/review-of-the-origins-and-current-practices-of-owls.pdf

Gannon, S. (2009) 'Difference as ethical encounter', in B. Davies and S. Gannon (eds), *Pedagogical Encounters* (New York: Peter Lang), pp. 69–88.

Gatfield, T. (2005) 'An investigation into PhD supervisory management styles: Development of a dynamic conceptual model and its managerial implications', *Journal of Higher Education and Policy Management*, 27(3), 311–25.

Gelsthorpe, L. (1990) 'Feminist methodologies in criminology: A new approach or old wine in new bottles?' in L. Gelsthorpe and A. Morris (eds), *Feminist Perspectives in Criminology* (Buckingham: Open University Press), p. 96.

Gergen, M. M. and Gergen, K. J. (1993) 'Narratives of the gendered body in popular autobiography', in R. Josselson and A. Lieblich (eds), *The Narrative Study of Lives*, vol. 1 (Newbury Park, CA: Sage), pp. 191–218.

Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P. and Trow, M. (1994) *The New Production of Knowledge: The Dynamics of Science and Research* (London: Sage).

Gibbs, G. (1981) *Teaching Students to Learn* (Buckingham: Open University Press).

Gibbs, G. (1991) *Lecturing to More Students* (Oxford: OCDS).

Giddens, A. (1991) *Modernity and Self-Identity: Self and Society in the Late Modern Age* (Cambridge: Polity Press), p. 5.

Gilster, P. (1997) *Digital Literacy* (New York: Wiley Computer Publishing).

Ginsberg, E. (1992) 'Not just a matter of English', *HERDSA*, 14(1), 6–8.

Goffman, E. (1959) *The Presentation of Self in Everyday Life* (Garden City, NY: Doubleday).

Golde, C. M. (2007) 'Signature pedagogies in doctoral education: Are they adaptable for the preparation of education researchers?', *Educational Researcher*, 36(6), 344–51.

Golde, C. M and Walker, G. E. (2006) *Envisioning the Future of Doctoral Education: Preparing Stewards of the Discipline* (San Francisco, Jossey-Bass).

Goodfellow, R. (2005) 'Academic literacies and e-learning: A critical approach to writing in the online university', *International Journal of Educational Research*, 43(7–8), 481–94.

Goodfellow, R. and Lea, M. (2005) 'Supporting writing for assessment in online learning', *Assessment & Evaluation in Higher Education*, 30(3): 261–71.

Goodfellow, R., Lea, M. and Jones, S. (2008) 'Digital literacies: How policies and practices are blurring boundaries in higher education', Institute of Educational Technology, the Open University, pp. 1–4, at: http://iet-staff.open.ac.uk/r.goodfellow/wdhe2008abstract.doc

Gordon, William, J. J. (1961) *Synectics: The Development of Creative Capacity* (New York: Harper & Harper).

Gower, E. (1986) *The Complete Plain Words*, rev. edn prepared by S. Greenbaum and J. Whitcut (London: HMSO).

Grant, B. (2003) 'Mapping the pleasures and risks of supervision discourse', *Studies in the Cultural Politics of Education*, 24(2), 176, 189.

Grant, B. M. (2008) 'Agonistic struggle master–slave dialogues in humanities supervision', *Arts and Humanities in Higher Education*, 7(1), 9–27.

Grant, B., McKinley, L., Manathunga, C., Knowles, S., Singh, M., Wisker, G. and Robinson, G. (2010), Symposium on cross-cultural supervision, Quality in Postgraduate Research Conference, 2010.

Grant, J., Kilminster, S. M., Jolly, B. and Cottrell, D. (2003) 'Clinical supervision of SpRs. Where does it happen, when does it happen and is it effective?' *Medical Education*, 37(2), 140–9.

Graves, N. (1997) *Working for a Doctorate: A Guide for the Humanities and Social Sciences* (London: Routledge).

Gray, B. (1994) 'Women in higher education: What are we doing to ourselves?', in S. Davies, C. Lubelska and J. Quinn (eds), *Changing the Subject* (London: Taylor & Francis).

Green, B. (1996) 'E-quality, postgraduate supervision and the education doctorate: The Deakin experience', paper presented at the 'Quality in Postgraduate Education – Is it happening?' Conference, Adelaide, April.

Green, B. and Lee, A. (1995) 'Theorising postgraduate pedagogy', *Australian Universities Review*, 2, 40–5.

Green, H., and Powell, S. (2005) *Doctoral Study in Contemporary Higher Education* (Maidenhead: Open University Press).

Greenfield, T. (ed.) (2002) *Research Methods for Postgraduates* (London: Edward Arnold).

Guile, D. and Young, M. (1998) 'Apprenticeship as a conceptual basis for a social theory of learning', *Journal of Vocational Education and Training*, 50(2), 173–92.

Gumport, P. (1993) 'Graduate education and research imperatives: Views from American campuses', in B. Clark (ed.), *The Research Foundations of Graduation Education* (Berkeley, CA: University of California Press).

Gumport, P. J. (1999) 'Graduate education and research: Interdependence and strain', in P. G. Altbach, R. O. Berdahl and P. J. Gumport (eds), *American Higher Education in the 21st Century: Social, Political and Economic Challenges* (Baltimore, MD: Johns Hopkins University Press).

Gurr, G. (2001) 'Negotiating the "Rackety Bridge" – a Dynamic Model for Aligning Supervisory Style with Research Student Development', *Higher Education and Development*, 20(1), 81–92.

Halpin, D. (2003) *Hope and Education: The Role of the Utopian Imagination* (London: Routledge Falmer).

Halse, C. and Malfroy, J. (2010) 'Retheorizing doctoral supervision as professional work', *Studies in Higher Education*, 35(1), 79–92.

Hammond, M. (2000) 'Communication within on-line forums: The opportunities, the constraints and the value of a communicative approach', *Computers & Education* 35(4): 251–62.

Hammond, J., Ryland, K., Tennant, M. and Boud, D. (2010) 'Building Research Supervision and Training across Australian Universities: Final Report' (Sydney: University of Technology, Sydney).

Hansford, B. C. and Maxwell, T. W. (1993) 'A master's degree program: Structural components and examiners' comments', *Higher Education Research and Development*, 12(2).

Harrington, K., O'Neill, P. and Bakhshi, S. (2007) 'Writing mentors and the writing centre: Producing integrated disciplinary writers', *Investigations in University Teaching and Learning*, 4(2), 26–32.

Harrington, K., O'Neill, P. and Reynolds, L. (2008) 'Using wikis and blogs to support writing development: The online evolving essay project', Research write-up for write now website, pp. 1–3, at: www.writenow.ac.uk/documents/others/evolving%20essay%20project.pdf

Harris, R. (1995) 'Overseas students in the UK university system', *Higher Education*, 29, 77–92.

Harrison, J. E. (2009) *Developing a Doctoral Identity – A Narrative Study in an Autoethnographic Frame*, University of KwaZulu-Natal, December 2009, at: http://dspace.ukzn.ac.za:8080/jspui/bitstream/10413/767/1/Harrison_L_2009_thesis.pdf (p. 329).

Hartley, J. and Fox, C. (2003) *Assessing the Mock Viva: The Experience of British Doctoral Students* (Keele: Keele University Press), pp. 2–3, 10–12, 15–16.

Hartley, J. and Jory, S. (2000) 'Lifting the veil on the viva: The experiences of PhD candidates in the UK', *Psychology Teaching Review*, 9, 76–90.

Hartley, P. and Wisker, G. (2004, 2011) *Interviewer Postgraduate Viva*, CD Rom (Sheffield Hallam University).

Hartley, P. and Wisker, G. (2010) *Interviewer Postgraduate Viva*, CD-ROM, second edition (Bradford University).

Hartnett, R. T. and Katz, J. (1977) 'The education of graduate students', *Journal of Higher Education*, 48(6), 646–64.

Haug, F. (1987) *Female Sexualisation* (London: Verso).

HEA ESCalate Centre for Education Website: Projects and Funding: Current Grants – Developing Collaborative Academic Writing Communities and a Collaborative Writer's Toolbox, at: http://escalate.ac.uk/5616

HEFCE (1999) 'Higher education funding for 2000–01 and 2001–02: Priorities for higher education', at: www.hefce.ac.uk/News/HEFCE/1999/dfee2499.htm

HEFCE (2009) 'Enhancing learning and teaching through the use of technology: A revised approach to HEFCE's strategy for e-learning', at: www.hefce.ac.uk/Pubs/hefce/2009/09_12/

HELTSA (2010) HELTSA, 23–5 November, Polokwane, Limpopo, South Africa, at: www.ul.ac.za/conf

Heinrich, K. T. (1995) 'Doctoral advisement relationships between women: On friendship and betrayal', *Journal of Higher Education*, 66(4) (Jul.–Aug.), 447–69.

Hensel, N. (1991) 'Realizing gender equality in higher education: The need to integrate work/family issues', *ASHE-ERIC Higher Education Report* 2 (Washington, DC: George Washington University Press).

Heron, J. (1975) *Six Category Intervention Analysis* (London: Tavistock Institute).

Hodge, B. (1995) 'Monstrous knowledge: Doing PhDs in the new humanities', *Australian Universities Review*, 38(2), 35–9.

Holbrook, A. (2001) 'PhD examination – assessment's least-mapped frontier', paper presented at AARE Conference, Fremantle, December.

Holbrook, A. (2002) 'How do examiners of doctoral theses utilise the written report?', paper presented at 'Examining the Quality of Doctoral Research', AERA Symposium, New Orleans, 1–5 April, p. 3.

Holbrook, A. and Bourke, S. (2002) 'PhD assessment: Design of the study, qualities of examiner reports and candidature information', paper presented at AERA Conference, New Orleans, 1–5 April, 1–4, 6–8, 10.

Holbrook, A., Bourke, S. and Cantwell, R. (2006) 'Using research candidate annual report data to examine aspects of supervision effectiveness', in M. Kiley and G. Mullins (eds), *Quality in Postgraduate Research: Knowledge Creation in Testing Times* (Canberra: CEDAM, Australian National University', pp. 84–98.

Holbrook, A., Bourke, S., Lovat, T. and Dally, K. (2005) 'An investigation of in consistencies in PHD examination decisions'. Proceedings of the Australian Association for Research in Education Conference, University of Melbourne, November 2004.

Holdaway, E. (1996) 'Current issues in graduate education', *Journal of Higher Education Policy and Management*, 18(1), 59–74.

Honey, P. and Mumford, A. (1986) *Using Your Manual of Learning Styles* (London: Peter Honey Publications).

Horn, R. (1996) 'Negotiating research access to organisations', *The Psychologist*, December, 551–2.

Hughes, S. and Wisker, G. (1998) 'Improving the teaching and learning experiences of overseas students', in C. Rust (ed.), *Improving Student Learning: Curriculum Development* (Oxford: Oxford Brookes University).

Hunt, J. (1984) 'The development of rapport through the negotiation of gender in field work among the police', *Human Organisation*, 43(4), 283–96.

Hussey, J. and Hussey, R. (1997, 2003) *Business Research: A Practical Guide for Undergraduate and Postgraduate Students* (London: Macmillan Press).

Hutchings, P. (1991) 'The teaching portfolio', *The Department Chair*, 2(1), 1, 33–5.

Hutchings, P. (1999) *Using Cases to Improve College Teaching: A Guide to More Reflective Practice*, 2nd edn (Washington, DC: American Association for Higher Education).

Hyatt, D. F. (2005) '"Yes, a very good point!": A critical genre analysis of a corpus of feedback commentaries on Master of Education assignments', *Teaching in Higher Education*, 10, 339–53.

Ingleton, C. (2000) 'Emotion in learning – a neglected dynamic', in R. James, J.

Milton and R. Gabb (eds), *Cornerstones of Higher Education*: *Selected papers from the 1999 HERDSA Annual Conference*, 12–15 July , *Melbourne Australia* (Melbourne: HERDSA).

Ingleton, C. and Cadman, K. (2002) 'Silent issues for international postgraduate research students: Emotion and agency in academic success', *Australian Educational Researcher*, 29(1), 93–113.

Inoue, H., Naito, E., and Koshizuka, M. (1997) 'Mediacy: What it is? Where to go?', *International Information & Library Review*, 29(3–4), 403–13.

Jackson, C. and Tinkler, P. (2000) 'Examining the doctorate: Institutional policy and the PhD examination process in the UK', *Studies in Higher Education*, 25, 167–80.

Jackson, C. and Tinkler, P. (2001) 'Back to basics: A consideration of the purposes of the PhD viva', *Assessment and Evaluation in Higher Education*, 26, 351–62.

Jackson, N (2002) *Guide for Busy Academics: Nurturing Creativity*, The Learning and Teaching support Networks (LTSN) Generic Centre, Version 1, October, pp. 1, 3.

Jalongo, M. R. and Isenberg, J. P. with Gerbracht, G. (1995) *Teachers' Stories: From Personal Narrative to Professional Insight* (San Francisco, CA: Jossey-Bass).

James, A. (2004) 'Autobiography and narrative in personal development planning in the creative arts', *Art, Design and Communication in Higher Education*, 3(2), 103–18.

JISC website, AWESOME Project, at: www.jisc.ac.uk/whatwedo/programmes/usersandinnovation/awesome.aspx

Johnson, L., Lee, A. and Green, B. (2000) 'The PhD and the autonomous self: Gender, rationality and postgraduate pedagogy', *Studies in Higher Education*, 25(2), 45, 135–47.

Johnson, N. B. (1986) 'Ethnographic research and rites of incorporation: a sex- and gender-based comparison', in T. L. Whitehead and M. E. Conaway (eds), *Self, Sex and Gender in Cross-cultural Fieldwork* (Urbana: University of Illinois Press).

Johnston, S. (1997) 'Examining the examiners: An analysis of examiners' report on doctoral thesis', *Studies in Higher Education: Journal of Higher Education*, 22(3), 333–47.

Jones, J. (2009) 'The perceived influence of cultural factors on international doctoral students and supervisors in cross-cultural supervision', Internal report, Centre for Learning and Teaching, University of Brighton.

Jones, S. and Lea, M. R. (2008) 'Digital literacies in the lives of undergraduate students: Exploring personal and curricular spheres of practice', *The Electronic Journal of e-Learning*, 6(3), 207–16.

Kandlbinder, P. and Peseta, T. (2000a) 'Online professional development for

postgraduate supervisors', in A. Herrmann and M. M. Kulski (eds), *Flexible Futures in Tertiary Teaching: Proceedings of the 9th Annual Teaching Learning Forum, 2–4 February 2000* (Perth: Curtin University of Technology), p. 1, at: http://lsn.curtin.edu.au/tlf/tlf2000/kandlbinder2.html.

Kandlbinder, P. and Peseta, T. (2000b) *In Supervisors' Words: An Insider's View of Postgraduate Supervision* (Sydney: Institute for Teaching and Learning).

Kearns, H., Gardiner, M. and Marshall, K. (2008) 'Innovation in PhD completion: The hardy shall succeed (and be happy!)', *Higher Education Research and Development* 27(2), 77–89.

Kelly, F. J. (2011) 'Cooking together disparate things: The role of metaphor in thesis writing', *Innovations in Education and Teaching International*, 48(4), 426–38.

Kerby, A. (1991) *Narrative and the Self* (Bloomington: Indiana University Press).

Kiely, M. (1982) 'Creative sensitivity in doctoral research: The supervisor's contribution', paper presented at the Annual Meeting of the American Psychological Association, Washington, DC, p. 5.

Kiley, M. (1998) '"Expectation" in a cross-cultural postgraduate experience', in M. Kiley and G. Mullins (eds), *Quality in Postgraduate Research: Managing the New Agenda* (Adelaide: University of Adelaide).

Kiley, M. (2000) 'Providing timely and appropriate support for international postgraduate students', in *Good Practice Working with International Students*, SEDA Paper 110 (December), 89–106.

Kiley, M. (2003) 'What examiners' comments can tell us about the postgraduate learning environment', 11th Improving Student Learning conference, Hanover International Hotel, Hinckley, Leicestershire.

Kiley, M. (2008) 'Completing a doctorate, for what?', in C. Rust (ed.), *Improving Student Learning: Improving Student Learning – for what*? (Oxford: Oxford University Press), pp. 159–67.

Kiley, M. (2009) '"You don't want a smart Alec": Selecting examiners to assess doctoral dissertations', *Studies in Higher Education*, 34(8), 889–903.

Kiley, M. (2011) 'Developments in research supervisor training: Causes and responses', *Studies in Higher Education*, 36(5) (August 2011), 585–99.

Kiley, M. and Mullins, G. (eds) (1998) *Quality in Postgraduate Research: Managing the New Agenda* (Adelaide: University of Adelaide, Advisory Centre for University Education).

Kiley, M. and Mullins, G. (2002) '"It's a PhD, not a Nobel Prize": How experienced examiners assess research theses', *Studies in Higher Education*, 27(4).

Kiley, M. and Wisker, G. (2006) 'Making the learning leap: RHD students crossing conceptual thresholds', Paper presented at the QPR conference, Adelaide, Australia.

Kiley, M. and Wisker, G. (2008) "Now you see it, now you don't": Identifying and supporting the achievement of doctoral work which embraces threshold

concepts and crosses conceptual thresholds', paper presented at the conference Threshold Concepts: From Theory to Practice, Queen's University, Kingston, Ontario, Canada.

Kiley, M., and Wisker, G. (2009) 'Threshold concepts in research education and evidence of threshold crossing', *Higher Education Research and Development*, 28(4), 431–41.

Kiley, M., and Wisker, G. (2010) 'Learning to be a researcher: The concepts and crossings', in J. H. F. Meyer, R. Land and C. Baillie (eds), *Threshold Concepts and Transformational Learning* (Rotterdam: Sense), pp. 399–414.

Kirkpatrick, A. and Mulligan, D. (1996) 'Cultures of learning in Australian universities: Reading expectations and practice in the Social and Applied Sciences', paper presented at the Applied Linguistics Association of Australia, 21st Annual Conference, Worlds of Discourse, Sydney, New South Wales.

Kitzinger, C. (1990) 'Resisting the discipline', in E. Burman (ed.), *Feminists and Psychological Practice* (London: Sage), pp. 124, 127.

Klein, R. D. (1987) 'The dynamics of the women's studies classroom: A review essay of the teaching practice of women's studies in higher education', *Women's Studies International Forum*, 10(2), 187–206.

Koestler, A. (1964, 1979) *The Act of Creation* (London: Penguin Books).

Kolb, D. A. (1984) *Experimental Learning: Experience as the Source of Learning and Development* (Englewood Cliffs, NJ: Prentice Hall).

Kouptsov, O. (1994) *The Doctorate in the Europe Region* (CEPES UNESCO).

La Pidus, J. B. (1997) 'Doctoral education: Preparing for the future', a report presented to the Council of Graduate Schools, at: www.cgsnet.org/publicationpolicynes/index-htm/

Landbeck, R. and Mugler, F. (1994) *Approaches to Study and Conceptions of Learning of Students at the University of the South Pacific* (Suva, Fiji: University of the South Pacific, CELT).

Lankshear, C. and McLaren, P. (eds) (1994) *Politics of Liberation: Paths from Freire* (London: Routledge).

Lankshear, C. and McLaren, P. (1995) 'Critical literacy and the postmodern turn', in L. A. McLaren, (ed.), *Critical Literacy: Politics, Praxis and the Postmodern* (New York: State University of New York Press), p. 13.

Lave, J. (1998) *Cognition in Practice: Mind, Mathematics and Culture in Everyday Life* (New York: Cambridge University Press).

Lave, J. and Wenger, E. (1991) *Situated Learning: Legitimate Peripheral Participation* (Cambridge: Cambridge University Press).

Lea, M. (2001) 'Computer conferencing and assessment: New ways of writing in higher education', *Studies in Higher Education*, 26(2), 163–81.

Lea, M. R. and Stierer, B. E. (2000) *Student Writing in Higher Education: New Contexts* (Florence, KY: Taylor & Francis).

Lea, M. R. and Stierer, B. (2009) 'Lecturers' everyday writing as professional practice in the university as workplace: New insights into academic identities', *Studies in Higher Education*, 34(4), 417–28.

LeCourt, D. (1998) 'Critical pedagogy in the computer classroom: Politicizing the writing Space', *Computers and Composition*, 15(3), 275–95.

Lee, A. (2008a) 'How are doctoral students supervised? Concepts of doctoral research supervision', *Studies in Higher Education*, 33(3), 267–81.

Lee, A. (2008b) 'Identifying different approaches to research supervision: A discussion paper for ECER Annual Conference for the European Educational Research Association, at: www.eera-ecer.eu/fileadmin/user_upload/.../ECER2008_1278_Lee.doc

Lee, A. (2011) *Successful Research Supervisions: Supervising Students Doing Research* (London: Routledge).

Lee, A. and Boud, D. (2003) 'Writing groups, change and academic identity: Research development as local practice', *Studies in Higher Education*, 28(2), 187–200.

Lee, A. and Boud, D. (2008) 'Framing doctoral education as practice', in D. Boud and A. Lee (eds), *Changing Practices of Doctoral Education (*London: Routledge).

Lee and Boud, 2010.

Lee, A. and Green, B. (2009) 'Supervision as metaphor', *Studies in Higher Education*, 34(6), 615–30.

Lee, A., Manathunga, C. and Kandlbinder, P. (2010) 'Shaping a culture: Oral histories of academic development in Australian universities', *Higher Education Research & Development*, 29(3), 307–18.

Lee, A., and Williams, C. (1999) 'Forged in fire: Narratives of trauma in PhD supervision pedagogy', *Southern Review*, 32(1), 6–26.

Lee, R. M. (1993) *Doing Research on Sensitive Topics* (London: Sage).

Leonard, D. (2001) *A Women's Guide to Doctoral Studies* (Buckingham: Open University Press), pp. 2, 39, 41, 42, 43, 45, 66, 206–7.

Leonard, D. (2002) 'The politics of gender and education', Conference Proceedings (London: Institute of Education), p. 59.

Leonard, D., Becker, R and Coate, K (2005) 'To prove myself at the highest level: The benefits of doctoral study', *Higher Education Research & Development*, 24(2) (May), 135–49.

Lester, S. (2004) 'Conceptualizing the practitioner doctorate', *Studies in Higher Education*, 29(6), 757–70.

Linden, J. (1999) 'The contribution of narrative to the process of supervising PhD students', *Studies in Higher Education*, 24(3), 351–69.

Lindop, N. (1985) 'Academic validation in the public sector of higher education', Report of the Committee of Enquiry (London: HMSO).

Lingard, B. and Ozga, J. (eds) (2007) *The RoutledgeFalmer Reader in Educational Policy and Politics* (London: RoutledgeFalmer), p. 278.

Lingard, R. (1996) 'Globalisation, the research imagination and deparochialising the study of education', *Globalisation, Societies and Education*, 4(1), 287–30.

Lingard, R. (2007) 'Deparochialising the study of education', in K. Gulson and C. Symes (eds), *Spatial Theories of Education* (New York: Routledge), pp. 233–50.

Livingstone, D. W. (1999) *The Education–Jobs Gap: Underemployment or Economic Democracy?* (Aurora, ON: Garamond Press).

London Metropolitan Writing Centre Website (2009) at: www.londonmet.ac.uk/depts/dops/writing-centre/writing-centre.cfm

London School of Hygiene and Tropical Medicine (2011) *Research Students' Handbook*, pp. 30, 32.

Loomba, A. (ed.) (1998) *Colonialism/Post Colonialism* (London: Routledge).

Lovat, T. (2002) *What Is This Thing Called RE: A Decade on?*, 2nd edn (Sydney: Social Science Press), pp. 4, 6.

Lovat, T., Holbrook, A., and Bourke, S. (2008) 'Ways of knowing in doctoral examination: How well is the doctoral regime?' *Educational Research Review*, 3(1), 66–76.

Love, A., and Street, A. (1998) in M. Kiley and G. Mullins (eds), *Quality in Postgraduate Research: Managing the New Agenda* (University of Adelaide: Advisory Centre for University Education), pp. 149, 154–5.

Lowenthal, D. and Wason, P. C. (1977) 'Academics and their writing', *The Times Literary Supplement*, 24 June, p. 781.

MacDonald Ross, G. (2007) 'Writing in the Disciplines': Report, HEA Subject Centre for Philosophical and Religious Studies, at: www.prs.heacademy.ac.uk/view.html/prsdocuments/388

MacFarlane, B. (2009) *Researching with Dignity* (London: Routledge).

MacKinnon, D. and Manathunga, C. (2003) 'Going global with assessment: What to do when the dominant culture's literacy drives assessment', *Higher Education Research & Development*, 22(2), 131–44.

Malcolm, I. (1996) 'Literary events across cultures in higher education', Faculty of Arts, Edith Cowan University.

Malfroy, J. (2005) 'Doctoral supervision, workplace research and changing pedagogic practices', *Higher Education Research & Development*, 24(2), 165–78.

Manathunga, C. (2005) 'The development of research supervision: Turning the light on a private space', *International Journal for Academic Development*, 10(1), 17–30, 207.

Manathunga, C. (2007) 'Intercultural postgraduate supervision: Ethnographic journeys of identity and power', in D. Palfreyman and D. L. McBride (eds),

Learning and Teaching across Cultures in Higher Education (Basingstoke, Palgrave Macmillan), pp. 93, 95.

Manathunga, C. (2011) Keynote, Stellenbosch University Postgraduate Supervision Conference, 2011.

Marton, F. and Saljo, R. (1976) 'On qualitative differences in learning – outcome and process', *British Journal of Educational Technology*, 46, 4–11.

Maxwell, T. (2003) 'From first to second generation professional doctorate', *Studies in Higher Education*, 28(3), 279–91.

McAlpine, L. and Åkerlind, G. S. (in press) 'Academic Practice in a Changing International Landscape', in L. McAlpine and G. S. Åkerlind (eds), *Becoming an Academic: International Perspectives* (Basingstoke: Palgrave Macmillan), ch. 1.

McAlpine, L., Jazvac-Martex, M. and Hopwood, N. (2009) Doctoral student exprience: Activities and difficulties influencing identity development', *International Journal for Research Development,* 1(1), 97–109.

McAlpine, L., Paulson, J., Gonsalves, A. and Jazvac-Martek, M. (in press) '"Untold" doctoral stories in the social sciences: can we move beyond cultural narratives of neglect?' *Higher Education Research and Development*.

McCormack, C. (1998) 'Memories bridge the gap between theory and practice in women's leisure research', *Annals of Leisure Research*, 1, 37–49.

McCormack, C. and Pamphilon, B. (1998, revised 2002) *The Balancing Act: Exploring Women's Experiences of Postgraduate Study, Supervision and Workload: A Workshop Manual* (Canberra: Centre for the Enhancement of Learning, Teaching and Scholarship, University of Canberra), p. 26.

McCormack, C. and Pamphilon, B. (2004) 'More than a confessional: post-modern groupwork to support postgraduate supervisors' professional development', *Innovations in Education and Teaching International*, 41(1) (January–February), 3–4, 25.

McNamara, D. (ed.) (1997) *Overseas Students in Higher Education* (London: Routledge).

McVey, D. (2008) 'Why all writing is creative writing', *Innovations in Education and Teaching International*, 45(3), 289–94.

McWilliam, E. (2005) 'Unlearning pedagogy', *Journal of Learning Design*, 1(1).

McWilliam, E. (2007) 'Is creativity teachable? Conceptualising the creativity/pedagogy relationship in higher education', *Research and Development in Higher Education*, 30(2), 376–83.

McWilliam, E. (2009) 'Doctoral education in risky times', in D. Boud and A. Lee (eds), *Changing Practices of Doctoral Education* (New York: Routledge).

McWilliam, E. and Hatcher, C. (1999) 'The taming of trauma: or how to be properly emotional', *Southern Review*, 32(2), 212–19.

Melamed, L. (1987) 'The role of play in adult learning', in D. Boud and, V. Griffin (eds), *Appreciating Adults Learning: From the Learner's Perspective* (London: Kogan Page).

Mellan, V. and Stracke, E. (2007) 'An analysis of written feedback on a PhD thesis', *Teaching in Higher Education*, 12(4), (August), 461–70.

Metcalfe, J. (2006) 'The changing nature of doctoral programmes', in U. Teichler (ed.), *The Formative Years of Scholars*, proceedings of a symposium held at the Haga Forum, Stockholm, 9–11 November, 2005 (London: Portland Press).

Metcalfe, J., Thompson, Q. and Green, H. (2002) 'Improving standards in post-graduate research degree programmes' (Bristol: HEFCE), p. 46.

Meyer, J. H. F. and Boulton-Lewis, G. M. (1997) 'Reflections on learning inventory (ROLI)', questionnaire (available from J. H. F. Meyer, Department of Education, University of Durham).

Meyer, J. H. F. and Kiley, M. (1998) 'An exploration of Indonesian postgraduate students' conceptions of learning', *Journal of Further and Higher Education*, 22(3), 8, 287–98.

Meyer, J. and Land, R. (2005) 'Threshold concepts and troublesome knowledge (2): Epistemological considerations and a conceptual framework for teaching and learning', *Higher Education*, 49, 373–88.

Meyer, J. and Land, R. (eds) (2006) *Overcoming Barriers to Student Understanding: Threshold Concepts and Troublesome Knowledge* (Abingdon: Routledge).

Meyer, J. H. F. and Shanahan, M. P. (2002) 'On variation in conception of "price" in economics', *Higher Education*, 43, 4–11.

Mezirow, J. (1978) 'Perspective transformation', *Adult Education*, 28, 100–10.

Miles, M. B. and Huberman, A. M. (1984) *Qualitative Data Analysis: A Sourcebook for New Methods* (London: Sage).

Mirza, H. S. (1995) 'Black women in higher education: defining a space/finding a place', in L. Morley and V. Walsh (eds), *Feminist Academics: Creative Agents for Change* (London: Taylor and Francis), p. 150.

Mitchell, C. (2010) 'Co-creating new guidance materials for supervising inter– and transdisciplinary postgraduate research students', QPR extended abstract at: http://cedam.anu.edu.au/sites/default/files/people/dr-margaret kiley/QPR2010_Proceedings.pdf#page=95

Morgan, John (2010) 'Focus on cuts undermines value of Browne's report, critics contend', *Times Higher Education*, 21 October 2010, at: www.timeshighereducation.co.uk/story.asp?storycode=413935

Moriarty, J. and Reading, C. (2010) 'Linking Creative Practice to the Personal Development Agenda', University of Brighton post conference publication, *From Spark to Flame* (Brighton: University of Brighton).

Morley, L., Leonard, D. and David, M. (2002) 'Variations in vivas: Quality and equality in British PhD assessments', *Studies in Higher Education*, 27(3).

Morris, C., Poyatas Matas, C., Wisker, G., Cheng, M., Lilly, J., Warnes, M., Robinson, G. and Trafford, V. (2010) *Wellbeing and the Research Student* (Falmer: University of Brighton Press).

Morris, C. and Wisker, G. (2011) 'ESCalate final report', Higher Education Academy.

Morris, J. and Meyer, J. H. F. (2003) 'Variation in the conceptions of learning of physiotherapy students in England and Wales: A longitudinal multicentre study', in C. Rust (ed.), *Improving Student Learning Theory and Practice – 10 Years On* (Oxford: OSCLD).

Moses, I. (1984) 'Supervision of higher degree students – problem areas and possible solutions', *Higher Education Research and Development*, 3, 153–65.

Moses, I. (1985) 'Supervising postgraduates', *HERDSA*, Green Guide no. 3 (University of New South Wales, Kensington: Higher Education Research and Development Society of Australasia), revised 2002, p. 10.

Moses, I. (1990) *Barriers to Women's Participation in Postgraduate Study* (Canberra: Australian Government Publishing Service).

Moses, I. (1993) 'Issues in women's participation', in D. Cullen (ed.), *Proceedings from the Symposium: Quality in PhD Education* (Canberra: Centre for Educational Development and Academic Methods (CEDAM) and The Graduate School, Australian National University).

Mullins, G. and Kiley, M. (1998) 'Quality in postgraduate education: The changing agenda', in M. Kiley and G. Mullins (eds), *Quality in Postgraduate Education: Managing the New Agenda* (Adelaide: Advisory Centre for University Education), pp. 1–14.

Murray, R. (2001) 'Integrating teaching and research through writing development for students and staff', *Active Learning in Higher Education*, 2(1) (July), 31–45, 144–6.

Murray, R. (2002) *How to Write a Thesis* (Buckingham: Open University Press), p. 78.

Murray, R. (2003) *How to Survive Your Viva: Defending your Thesis in an Oral Examination* (Buckingham: Open University Press).

Nakamura, J. and Csikszentmihalyi, M. (2001) 'Catalytic creativity: The case of Linus Pauling', *American Psychologist*, 56(4), 337–41.

Nerad, M. and Cerny, J. (1999) 'From rumors to facts: Career outcomes of English PhDs results from the PhDs – ten years later study', *Communicator*, 32(7), 1–11.

Neumann, R. (2005) 'Doctoral differences: Professional doctorates and PhDs compared', *Journal of Higher Education Policy and Management*, 27(2) 173–88.

Newman, J. (2001) 'The shape of graduate studies in English', *Issues in English: Doctor! Doctor! Doctoral Studies in English in Twenty-First Century Britain*, 1, 15–24.

Nightingale, P. (1984) 'Examination of research theses', *Higher Education Research and Development Journal*, 3(2), 13–150.

Nishio, A. (2001) 'The experience of Japanese postgraduate students at the

University of London, with special reference to gender', PhD thesis, University of London.

Nuernberg, C. and Thompson, R. (2011) 'Academic career paths of social science PhD graduates' at: www.apprise.ox.ac.uk/ downloads/pdf/report_acedemic_career_paths.pdf

Nussbaum, M. (2010) *Not for Profit: Why Democracy Needs the Humanities* (Princeton, NJ: Princeton University Press), at: www.britac.ac.uk/events/ 2010/Not_for_Profit-Why_Democracy_needs_the_Humanities.cfm.

Okorocha, E. (1997) 'Supervising international research students', *Issues in Postgraduate Supervision, Teaching and Management* (London: SRHE).

Oleson, V. and Whittaker, E. (1968) *The Silent Dialogue* (San Francisco, CA: Jossey-Bass).

O'Neill, P. (2009) 'Using peer writing fellows in British universities: Complexities and possibilities', *AD Across the Disciplines: Interdisciplinary Perspectives on Language, Learning and Academic Writing*, WAC Clearinghouse, at: http://wac.colostate.edu/atd/fellows/oneill.cfm

O'Rourke, R. (2009) AWESOME Dissertation Environment: JISC Final Report, pp. 1–63, at: www.jisc.ac.uk/whatwedo/programmes/usersandinnovation/awesome.aspx

Ottewill, R., Shephard, K. and Fill, K. (2002) 'Assessing the contribution of collections of case studies to academic development in higher education', *International Journal for Academic Development*, 7(1), 51–62.

Owler, K. (1998) 'Subject to closure: Meditating on the doctoral process', PhD thesis, University of New South Wales, Sydney, p. 212.

Owler, K. (2010) 'A "problem" to be managed? Completing a PhD in the Arts and Humanities', *Arts and Humanities in Higher Education*, 9(3), 289–304.

Ozga, J. (1998) 'The entrepreneurial researcher: Re-formations of identity in the research marketplace', *International Studies in Sociology of Education*, 8(2), 143–53.

Park, C. (2005) 'New Variant PhD: The changing nature of the doctorate in the UK', *Journal of Higher Education Policy and Management*, 27(2), 189–207.

Park, C. (2007) 'Redefining the Doctorate', HEA, January, p. 29.

Parker, L., Kirkpatrick, A. and Slaney, K. (1996) 'Communication skills, in the context of postgraduate supervision of students from language backgrounds other than English', report from Curtin University of Technology, Perth, p. 1.

Parry, O., Atkinson, P. and Delamont, S. (1992) 'Free range or battery laid: Doing a PhD in the social sciences', paper presented at the September conference, 'Research Training in the Social Sciences', St John's College, Cambridge.

Passig, D. and Schwartz, G. (2007) 'Collaborative writing: Online versus frontal', *International Journal on E-Learning*, 6(3), 395 (318).

Patterson, A. (2001) 'Overproduction', *Issues in English: Doctor! Doctor! Doctoral Studies in English in Twenty-First Century Britain*, 1, 5–13 (8).

Pearson, M. (1999) 'The changing environment for doctoral education in Australia: Implications for quality management, improvement and innovation', *Higher Education Research and Development*, 18(3), 277, 276, 282.

Pearson, M. and Brew, A. (2002) 'Research training and supervision development', *Studies in Higher Education*, 27(2), 135–50.

Penny, L. (2010) 'It's an education, all right', *New Statesman*, 10 April 2011, at: www.newstatesman.com/blogs/laurie-penny/2011/04/british-universities-students

Perkins, D. (1999) 'The many faces of constructivism', *Educational Leadership*, 57(3).

Petersen, E. B. (2007) 'Negotiating academicity: Postgraduate research supervision as category boundary work', *Studies in Higher Education*, 32(4), 475–87.

Phillips, E. (1994) 'Appendix 1a: Some suggestions for staff development concerning the supervision of research and research students', in L. Elton and USDU's Task Force Three (1994), *Staff Development in Relation to Research*, occasional Green Paper No. 6 (Sheffield: Universities' Staff Development Unit).

Phillips, E. (1998) *Postgraduate Supervision, Teaching and Management* (London: SRHE).

Phillips, E. and Pugh, D. S. (1994, 2000) *How to Get a PhD: A Handbook for Students and Their Supervisors*, 2nd edn (Buckingham: Open University Press).

Phipps, A. (2009) 'Editorial: Violence and exploitation in the Humanities?' *Arts and Humanities in Higher Education*, 8(1), 5–7.

Phipps, A., Parker, J. and Chambers, E. (2007) 'Editorial: Knowledge transfer in the Arts and Humanities', *Arts and Humanities in Higher Education*, 6(3), 235–6.

Pitkethly, A. and Prosser, M. (1995) 'Examiners' comments on the international context of PhD theses', in C. McNaught and K. Beattie (eds), *Research into Higher Education: Dilemmas, Directions and Diversions* (Melbourne: HERDSA), pp. 129–36.

Pololi, L., Knight, S. and Dunn, K. (2004) 'Facilitating Scholarly Writing in Academic Medicine', *Journal of General Internal Medicine*, 19(1), 64–8.

Pool, C. R. (1997) 'A new digital literacy: A conversation with Paul Gilster', *Educational Leadership*, 55(3), 6–11.

Powell, S. (2006) 'Models for doctorates in Europe', presentation at UKCGE European Summer Conference 'New Dimensions for Doctoral Programmes in Europe: Training, Employability and the European Knowledge Agenda', Florence, Italy.

Powell, S., and Long, E. (2005) 'Professional doctorate awards in the UK' at: www.ukcge.ac.uk/OneStopCMS/Core/SearchResults.aspx?Mode=404andS earchQuery=report_downloads (accessed January 22 2011), *Studies in Higher Education*, p. 779.

Power, M. (1997) *The Audit Society: Rituals of Verification* (Oxford: Oxford University Press), p. 100.

Poyatos Matas, C. (2008) 'An Innovative Approach to Research Supervision', paper presented at the University of Brighton Learning and Teaching Conference, Brighton, UK.

Poyatos Matas, C. (2009) 'A New Approach to Research Supervision', in J. Barlow, G. Louw and M. Price (eds), *Social Purpose and Creativity – Integrating Learning in the Real World* (Falmer: University of Brighton Press).

PrD (Professional Doctorate in Health and Social Care) Handbook (2003) (Cambridge: Anglia Polytechnic University, School of Health Care Practice).

Purdue Online Writing Lab (OWL) (2008) at: http://owl.english.purdue.edu/

Purkiss, D. (1994) 'The lecherous professor revisited: Plato, pedagogy and the scene of harassment', in C. Brant and Y. Lee Too (eds), *Rethinking Sexual Harassment* (London: Pluto), p. 244.

Quality Assurance Agency (QAA) (2007) English benchmark statement, London.

QAA (2008a) 'Framework for Higher Education Qualifications: The framework for higher education qualifications in England, Wales and Northern Ireland (FHEQ)' (second edition revised August 2008), at: www.qaa.ac.uk/academicinfrastructure/FHEQ/EWNI08/default.asp#p4.5 (accessed May 14 2011).

QAA (2008b) 'Outcomes from institutional audit published papers, institutions' Support for e-Learning, Second Series', at: www.qaa.ac.uk/reviews/institutionalAudit/outcomes/series2/SupportforElearning

QAA (2011a) 'A rough guide to the UK doctorate', draft: January 2011, at: www.qaa.ac.uk/AssuringStandardsAndQuality/Documents/RoughguideUKdoctorate.pdf

QAA (2011b) 'Doctoral degree characteristics', draft: January 2011, at www.qaa.ac.uk/Publications/InformationAndGuidance/Documents/Doctoraldegreechara.pdf

Ramazanoglu, C. (1987) 'Sex and violence in academic life, or you can keep a good woman down', in J. Hanmer and M. Maynard (eds), *Women, Violence and Social Control* (Basingstoke: Macmillan).

Ramsden, P. (1979) 'Student learning and perceptions of the academic environment', *Higher Education*, 8, 411–27.

Rancière, J. (1991) *The Ignorant Schoolmaster: Five Lessons in Intellectual Emancipation* (Stanford, CA: Stanford University Press).

Rees, R. 'Brainpower for sale?', at: www8.open.ac.uk/platform/blogs/society-matters/brainpower-sale

Reeve, F., Cartwright, M. and Edwards, R. (2002) *Supporting Lifelong Learning: Organising Learning* (London: Falmer Press).

Reeves, P. and Robins, J. L. (1995) *Postgraduate supervision project: Report* (Bentley: Curtin TLG).

Reid, A. and Petocz, P. (2004) 'Learning domains and the process of creativity', *The Australian Educational Researcher*, 31(2).

Reid, I. (1996) *Higher Education or Education for Hire? Language and Values in Australian Universities* (Rockhampton: Central Queensland University Press).

Rendel, M. (1996) 'How many women academics in 1912–1977?' in R. Deem (ed.), *Schooling for Women's Work* (London: Routledge), pp. 142–61.

Reynolds, A., Hamed, M. and Barnett, R. (1991) *Part-Time Students and Their Experience of Higher Education* (Buckingham: SHRE & Open University Press).

Reynolds, P. (1986) *Academic Standards in Universities* (London: CVCP).

Rich, A. (1985) 'Taking women students seriously', in M. Culley and C. Portuges (eds), *Gendered Subjects: The Dynamics of Feminist Teaching* (London: Routledge & Kegan Paul).

Richardson, L. (1990) *Writing Strategies: Reaching Diverse Audiences* (Newbury Park, CA: Sage).

Richardson, L. (1997) *Fields of Play: Constructing an Academic Life* (New Brunswick, NJ: Rutgers University Press).

Richardson, V. and Robinson, D. (eds) (1993) *Introducing Women's Studies: Feminist Theory and Practice*, 1st edn (London: Macmillan), p. 6.

Rickard, C. M., McGrail, M. R., Jones, R., O'Meara, P., Robinson, A., Burley, M. and Ray-Barruel, G. (2009) 'Supporting academic publication: Evaluation of a writing course combined with writers' support group', *Nurse Education Today*, 29(5), 516–21.

Rizvi, F. and Lingard, B. (2006) 'Globalization and the changing nature of the OECD's educational work', in H. Lauder, P. Brown, J. Dillabough and A. Halsey (eds), *Education, Globalization and Social Change* (Oxford: Oxford University Press), pp. 247–60.

Roberts Report (2002), at: http://webarchive.nationalarchives.gov.uk/+/ http://www.hm-treasury.gov.uk/documents/enterprise_and _productivity/research_and_enterprise/ent_res_roberts.cfm

Robinson, G. (2006) *Art in Process* (Cambridge, UK: Calypso Press).

Robinson, G. and Hulston, D. (2007) 'Think inside the sketchbook: A playground for ideas', keynote paper presented at the NSEAD conference, Strathclyde University, UK.

Robinson, K. (1992) 'R4: The real world of research', iii–v, in *Nursing Times*, 88.

Rollinson, P. (2005) 'Using peer feedback in the ESL writing class', *ELT Journal*, 59(1), 23–30.

Rudd, E. (1985) *A New Look at Postgraduate Failure* (Guildford: SRHE).

Salvo, M. J., Brizee, H. A., Driscoll, D. and Souza, M. (2006) 'Preliminary report to the Purdue writing lab: Assessing usability of the "new" online writing lab (OWL) design and contents', at: http://owl.english.purdue.edu/owl/

Salvo, M. J., Ren, J., Brizee, H. and Conard-Salvo, T. S. (2009) 'Usability research

in the writing lab: Sustaining discourse and pedagogy', *Computers and Composition*, 26(2), 107–21.

Salzberger-Wittenberg, I., Henry, G. and Osborne, E. (1983) *The Emotional Experience of Learning and Teaching* (London: Routledge & Kegan Paul).

Samuelowicz, K. (1987) 'Learning problems of overseas students: Two sides to a story', *Higher Education Research and Development*, 6(2), 121–33.

Sandler, B. (1993) 'The campus climate revisited: Chilly for women faculty, administrators, and graduate students', in J. S. Glazer, E. M. Benisimon and B. K. Townsend (eds), *Women in Higher Education: A Feminist Perspective* (Needham Heights, MA: Ginn Press).

Sankaran, S., Swepson, P. and Hill, G.W. (2005) 'Do research thesis examiners need training?: Practitioner stories', *The Qualitative Report*, 10(4), 817–35.

Savin-Badin, M. and Major, C. (2012, forthcoming) *A Practical Introduction to Qualitative Research: Methodology Matters* (London: Routledge).

Schmeck, R. R. (1986) *Learning Styles and Learning Strategies* (New York: Plenum).

Schön, D. A. (1983) *The Reflective Practitioner* (New York: Basic Books).

Schön, D. A. (1987) *Educating the Reflective Practitioner* (San Francisco, CA: Jossey-Bass), p. 6.

Scott, D., Brown, A., Lunt, I. and Thorne, L. (2004) *Professional Doctorates: Integrating Professional and Academic Knowledge* (Maidenhead: Open University Press and McGraw-Hill Education).

Servage, Laura (2009) 'Alternative and professional doctoral programs: What is driving the demand?' *Studies in Higher Education*, 34(7), 765–79, at: www.informaworld.com

Shad, Sonali (2007) *Getting Your PhD* (London: Sage).

Sikes, P. (2006) 'Working in a "new" university: In the shadow of the research assessment exercise?' *Studies in Higher Education*, 31(5).

Silver, H. (1995) 'The external examiner system: Possible futures', a report of a project commissioned by the Higher Education Quality Council (London: Open University Quality Support Centre).

Simkiss, S. (2009) JISC Project Plan for COWL, pp. 1–27, at: www.jisc.ac.uk/whatwedo/programmes/elearning/curriculumdelivery/cowl.aspx

Singh, M. (2009), 'Using Chinese knowledge in internationalising research education: Jacques Rancière, an ignorant supervisor and doctoral students from China', *Globalisation, Societies and Education*, 7(2), 92–107.

Slaney, K. (1996) 'Models of supervision for enhancing the English language communication skills of postgraduate students', in G. Wisker and N. Sutcliffe (eds) *Good Practice in Postgraduate Supervision* (Birmingham: SEDA Publications).

Slaney, K. (1999) in M. Kiley and G. Mullins (eds) (2000) *Quality in Postgraduate Research: Making Ends Meet* (Adelaide: Advisory Centre for University Education, University of Adelaide), pp. 72–3.

Smith, B. (2000) 'The challenge of making ends meet in postgraduate research training', in M. Kiley and G. Mullins (eds), *Quality in Postgraduate Research: Making Ends Meet*, Proceedings of the 2000 Quality in Postgraduate Research Conference, (Adelaide, Advisory Centre for University Education, University of Adelaide), pp. 25–9.

Squires, G. (1994) *A New World of Teaching and Training* (Hull: University of Hull).

Stahl, G., Koschmann, T. and Suthers, D. (2006) 'Computer-supported collaborative learning: An historical perspective', in R. K. Sawyer (eds), *The Cambridge Handbook of the Learning Sciences* (Cambridge: Cambridge University Press).

Stambor, Z (2006) 'How laughing leads to learning', *Monitor on Psychology*, 37(6), at: www.apa.org/monitor/jun06/learning.html.

Stanley, J. (1995) 'Pain(t) for healing: The academic conference and the class/embodied self', in L. Morley and V. Walsh (eds), *Feminist Academics: Creative Agents for Change* (London: Taylor and Francis), pp. 172–3.

Stevens, K. and Asmar, C. (1999) *Doing Postgraduate Research in Australia* (Carlton: Melbourne University Press).

Stoltenberg, C. D., McNeill, B. W. and Crethar, H. C. (1994) 'Changes in supervision as counsellors and therapists gain experience: a review', in *Professional Psychology: Research and Practice*, 25(4), 416–49.

Strauch, B. (2010) *The Secret Life of the Grown-Up Brain: The Surprising Talents of the Middle-Aged Mind* (New York: Viking).

Strauss, A. and Corbin, J. (1990) *Basics of Qualitative Research: Grounded Theory Procedures and Techniques* (Newbury Park, CA: Sage).

Strauss, P., Goodfellow, R. and Puxley, M. (2009) 'A contextualised online writing support system – Creating the links', paper submitted for the ASCILATE Conference, Auckland, December 2009.

Sullivan, G. (2005) *Art Practice As Rese*arch (Thousands Oaks, CA: Sage).

Svensson, L. (1978) 'Some notes on a methodological problem in the study of the relationship between thought and language: Describing the thought content in terms of different conceptions of the same phenomenon', *Reports from the Institute of Education*, no. 69 (Gothenburg: Gothenburg University, Department of Education and Educational Research).

Tanner, T. (1971) *City of Words* (London: Jonathan Cape).

Tapscott, D. (1998) *Growing Up Digital: The Rise of the Net Generation* (New York: McGraw-Hill).

Thomas, P. and Bain, J. D. (1982) 'Consistency in learning strategies', *Higher Education*, 11, 249–59.

Thompson, J. (1983) *Learning Liberation: Women's Response to Men's Education* (London: Croom Helm), p. 81.

Tiffin, H. (1987) 'Comparative literature and post-colonial counter discourse', *Kunapipi*, 9, p. 3.

Times Higher Education (2010) 'Browne Review: How Britain Has Reacted', 13 October 2010, at: www.timeshighereducation.co.uk/story.asp?storycode= 413870

Tinkler, P. and Jackson, C. (2000) 'Examining the doctorate: Institutional policy and the PhD examination process in Britain', *Studies in Higher Education*, 25(2), 167–80.

Tinkler, P. and Jackson, C. (2001) 'Back to Basics: A consideration of the purposes of the PhD Viva', *Assessment and Evaluation in Higher Education*, 26(4), 355–66.

Tinkler, P. and Jackson, C. (2002) 'In the dark? Preparing for the PhD Viva', *Quality Assurance in Education*, 10(2), 86–97.

Todd, L. (1996) 'Supervising post-graduate students: problem or opportunity?' in D. McNamara and R. Harris (eds), *Quality Teaching in Higher Education for Overseas Students* (London: Routledge), p. 4.

Todd, S. (1997) 'Supervising overseas students: Problem or opportunity', in D. McNamara (ed.), *Overseas Students in Higher Education* (London: Routledge).

Topping, K. J., Smith, E. F., Swanson, I. and Elliot, A. (2000) 'Formative peer assessment of academic writing between postgraduate students', *Assessment & Evaluation in Higher Education*, 25(2), 149–69.

Trafford, V. and Leshem, S. (2002a) 'Questions in a doctoral viva', in UK Council for Graduate Education Research Degree Examining Symposium (London, April).

Trafford, V. N. and Leshem, S. (2002b) 'Starting at the end to undertake doctoral research: Predictable questions as stepping stones', *Higher Education Review*, 35, 31–49.

Trafford, V. N. and Leshem, S. (2008) *Stepping Stones to Achieving Your Doctorate: Focusing on Your Viva from the Start* (Maidenhead: Open University Press), p. 19.

Trahar, S. (2011) 'The doctorate: International stories of the UK experience', ESCalate, Bristol, p. 5.

Traweek, S. (1988) *Beamtimes and Lifetimes* (Cambridge, MA: Harvard University Press).

University of Coventry Academic Writing Centre, at: www.coventry.ac.uk/ cu/caw

University of North Carolina-Chapel Hill Writing Centre (2007) at: www.unc.edu/depts/wcweb/about.html

Vilkinas, T. and Cartan, G. (2006) 'The integrated competing values framework: Its spatial configuration', *Journal of Management Development*, 25(6), 505–21.

Vitae (2011) Researcher Development Framework Report, at: www.vitae. ac.uk/CMS/files/upload/Vitae-Researcher-Development-Framework.pdf (accessed 28 July 2011).

Warren, C. A. B. (1988) *Gender Issues in Field Research* (London: Sage).

Warren Piper, D., Murray, R., Cox., P., Wisker, G. and Weekes, J. (1989) *Enquiry into the Role of the External Examiner* (London: HMSO).

Wason, P. C. (1974) 'Notes on the supervision of PhDs', *Bulletin of the British Psychological Society*, 27, 25–39.

Watkins, D. and Hattie, J. (1981) 'The learning processes of Australian university students: Investigations of Contextual and Personological Factors', *British Journal of Education Psychology*, 15, 384–93.

Watson, D. and Schuller, T. (2009) *Learning through Life: Inquiry into the Future for Lifelong Learning* (London: NIACE).

Watts, J. H. (2008) 'Challenges of supervising part-time PhD students: Towards student centred practice', *Teaching in Higher Education*, 13(3) (June), 369–73.

Wenger, E. (1998) *Communities of Practice: Learning, Meaning, and Identity* (Cambridge: Cambridge University Press), pp. 102, 149.

White, M. (1997) *Narratives of Therapists' Lives* (Adelaide: Dulwich Centre Publications).

White, M. and Epston, D. (1990) *Narrative Means to Therapeutic Ends* (New York: W. W. Norton).

Wikeley, F. and Muschamp, Y. (2004) 'Pedagogical implications of working with doctoral students at a distance', *Distance Education*, 25(1), 125–42.

Wilby, P. (2011) 'The awful truth: Education won't stop the west getting poorer', guardian.co.uk, 28 February 2011, at: www.guardian.co.uk/commentisfree/2011/feb/28/education-jobs-middle-class-decline

Wilkinson, D. Work on fear and emotional resilience, at: www.fearcourse.com

Willetts, D. (2010) UUK conference speech, Universities UK Annual Conference, Cranfield University, 9 September 2010.

Williams, J. and Jacobs, J (2004) 'Exploring the use of blogs as learning spaces in the higher education sector', *Australasian Journal of Educational Technology*, 20(2), 232–47.

Williams, S. (2003) 'Postgraduate training in research methods: Current practice and future needs in English', English subject centre report, no. 3 (February), Lancaster.

Winter, R. (1993) 'Continuity and progression: Assessment vocabularies for higher education', unpublished research report data (Chelmsford: Anglia Polytechnic University, Faculty of Health and Social Work).

Winter, R., Griffiths, M. and Green, K. (2000) 'The "academic" qualities of practice: What are the criteria for a practice-based PhD?' *Studies in Higher Education*, 25(1), 15–19, 25–37.

Wisker, G. (1996) *Empowering Women in Higher Education* (London: Kogan Page).

Wisker, G. (1998) *The Research as Learning Questionnaire* (Cambridge: Anglia Polytechnic University).

Wisker, G. (1999) 'Learning conceptions and strategies of postgraduate

students (Israeli PhD students) and some steps towards encouraging and enabling their learning', paper presented to the 2nd Postgraduate Experience Conference: Developing Research Capacity in the New South Africa, conference proceedings, Cape Town, South Africa, p. 1.

Wisker, G. (2000) 'Postgraduate learning styles and enabling practices: A multi-cultural action research study', in M. Kiley and G. Mullins (eds) *Quality in Postgraduate Research: Making Ends Meet* (Adelaide: Advisory Centre for University Education, University of Adelaide).

Wisker, G. (2001a) 'Good practice working with international students', SEDA Paper 110.

Wisker, G. (2001b) *The Postgraduate Research Handbook: Succeed with your MA, MPhil, EdD and PhD* (Basingstoke: Palgrave Macmillan), pp. 86–101, 301–2.

Wisker, G. (2005, 2012) *The Good Supervisor* (Basingstoke: Palgrave Macmillan).

Wisker, G. (2006) 'Liminal spaces and transitional experience: Postgraduate students crossing conceptual thresholds', Threshold Concepts within the Disciplines Symposium, University of Strathclyde, Glasgow.

Wisker, G. (2007) *The Postgraduate Research Handbook*, 2nd edn (Basingstoke: Palgrave Macmillan).

Wisker, G. (2009a) 'Articulate: Online support and development for academic writing for publication', SRHE conference, 2009.

Wisker, G. (2009b) *The Undergraduate Research Handbook* (Basingstoke: Palgrave Macmillan).

Wisker, G. (2010) 'The good enough doctorate: Doctoral learning journeys', *Acta Academica Supplementum*, 1, pp. 223–42, at: www.ufs.ac.za/ journals_ ActaAcademica.

Wisker, G. and Hartley, P. (2004) *The Interviewer Viva* (CD-ROM) (Sheffield: Sheffield Hallam University).

Wisker, G. and Kiley, M. (2011) SRHE or other outlet article.

Wisker, G. and Kiley, M. (2012) 'Professional Learning: How Supervisors Learn from Examining', *International Journal for Academic Development.*

Wisker, G., Masika, R., Kiley, M. (2012) (under consideration) Doctoral examining article

Wisker, G., Morris, C., Cheng, M., Masika, R., Warnes, M., Lilly, J., Trafford, V. and Robinson, G. (2010) 'Doctoral Learning Journeys – final report of the NTFS-funded project'.

Wisker, G. and Robinson, G. (2007) 'How might we encourage postgraduate students of literature and art to cross conceptual thresholds and achieve threshold concepts in their research?' paper presented at the European Association for Research on Learning and Instruction (EARLI) conference, Budapest.

Wisker, G. and Robinson, G. (2008) 'Improving postgraduate student learning for sustainable social development, research capacity building and personal

growth', in C. Rust (ed.), *Improving Student Learning* (Oxford: Oxford Centre for Staff and Learning Development).

Wisker, G. and Robinson, G. (2009) 'Encouraging postgraduate students of literature and art to cross conceptual thresholds, Innovations', *Education and Teaching International*, 46(3) (August), pp. 317–30.

Wisker, G. and Robinson, G. (forthcoming 2012) 'Doctoral "orphans": Nurturing and supporting the success of postgraduates who have lost their supervisors', *Higher Education Research Development*.

Wisker, G., Robinson, G. and Jones, J. (2012) 'The culturally inflected voice: Negotiation and recognition without dumbing', IDERN (work in progress).

Wisker, G., Robinson, G., and Kiley, M. (2008) 'Crossing liminal spaces: Encouraging postgraduate students to cross conceptual thresholds and achieve threshold concepts in their research', in M. Kiley and G. Mullins (eds), *Quality in Postgraduate Research: Research Education in the new Global Environment – Part 2: Conference Proceedings* (Canberra: CEDAM, ANU).

Wisker, G., Robinson, G. and Shacham, M. (2007) 'Postgraduate research success: Communities of practice involving cohorts, guardian supervisors and online communities', *Innovations in Education and Teaching International*, 44(3), 301–20.

Wisker, G., Robinson, G., Trafford, V., Creighton, E. and Warnes, M. (2003) 'Recognising and overcoming dissonance in postgraduate student research', *Studies in Higher Education*, 28(1).

Wisker, G., Robinson, G., Trafford, V., Lilly, J. and Warnes, M. (2004) 'Achieving a doctorate: Metalearning and research development programmes supporting success for international distance students', *Innovations in Education and Teaching International*, 41(4), 473–89.

Wisker, G., Robinson, G., Trafford, V., Warnes, M. and Creighton, E. (2003) 'From supervisory dialogues to successful PhDs: Strategies supporting and enabling the learning conversations of staff and students at postgraduate level', *Teaching in Higher Education*, 8(3), 383–97.

Wisker, G. and Savin-Baden, M. (2009) 'Priceless conceptual thresholds: Beyond the "stuck place" in writing', *London Research Education*, 7(3), 235–47.

Wisker, G. and Sutcliffe, N. (eds) (1999) *Good Practice in Research Supervision* (Birmingham: SEDA).

Wisker, G., Waller, S., Richter, U., Robinson, G., Trafford, V., Wicks, K. and Warnes, M. (2003) 'On nurturing hedgehogs: Development online for distance and offshore supervision', HERDSA Conference, Christchurch, New Zealand.

Woods, P. (1990) *Teacher Skills and Strategies* (London: Falmer Press).

Wright, J. and Lodwick, R. (1989) 'The process of the PhD: A study of the first year of a doctoral study', *Research Papers in Education*, 4, 22–56.

Zuber-Skerritt, O. (2002) *Supervising Postgraduate Students from Non-English-Speaking Backgrounds* (Buckingham: Open University Press).

Zuber-Skerritt, O. (2011) *Action Leadership: Towards a Participatory Paradigm* (Dordrecht, The Netherlands: Springer International).

Zuber-Skerritt, O. (2012) *Action Research for Sustainable Development in a Turbulent World* (Bingley, UK: Emerald Group Publishing).

Zuber-Skerrit, O. and Ryan, Y. (1994) *Quality in Postgraduate Education* (London: Kogan Page).

Website addresses

http://awesome.leeds.ac.uk/

http://cuba.coventry.ac.uk/cowl/

http://eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=EJ766265&ERICExtSearch_SearchType_0=no&accno=EJ766265

http://owl.english.purdue.edu/

www.apu.ac.uk/research/gradsch/gshome.shtml

www.bubl.ac.uk/link

www.coventry.ac.uk/cu/caw

www.cryer.freeserve.co.uk/supervisors.htm

www.fearcourse.com

www.grad.ac.uk/3_2_1.jsp

www.grad.ac.uk/downloads/rdp_report/rdp_framework_report.pdf

www.heacademy.ac.uk

www.ilthe.ac.uk

www3.imperial.ac.uk/clinicalresearchgovernanceoffice/research governance/whatisresearchgovernance

www.londonmet.ac.uk/depts/dops/writing-centre/writing-centre.cfm

www.ioe.ac.uk/doctoralschool/info-viva.htm

www.isi.knowledge.com

www.palgrave.com/studyskills/tutors.asp

www.phys.unsw.edu.au/%7Ejw/viva.html

www.researchconcordat.ac.uk

www.sosig.ac.uk

www.unc.edu/depts/wcweb/about.html

www.uq.edu.au

www.vitae.ac.uk

www.vitae.ac.uk/researchers/156431-376411/The-Guardian-discusses-Life-after-a-PhD.html

www.writenow.ac.uk/