# Successful Doctoral Training in Nursing and Health Sciences

## A Guide for Supervisors, Students and Advisors

Debra Jackson
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Supervision is a very rewarding and integral aspect of our work that is central to who we are as scholars, scientists, educationalists, clinicians and researchers. Between us, we have been privileged to personally supervise well over 100 doctoral students to completion, and we have all had responsibility for governance of doctoral programs across several institutions. We dedicate this book to our students, to colleagues who are current doctoral supervisors and their students, as well as to those who will follow us as doctoral students and supervisors. We hope this text contributes to a stronger, more robust culture of doctoral training in nursing and health sciences.

Debra Jackson

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# Preface

Doctoral supervision is a form of teaching and learning that is both unique and distinctive, and essential to the future of nursing and other health disciplines. However, there are relatively few places to share and document our work as supervisors, and much of what we do as supervisors goes unseen and unrecorded. The usual student acknowledgement to supervisors that appears in completed theses are usually highly flattering and written in a spirit of relief to be finally submitting the thesis. While these words are greatly appreciated, they do not capture the complexities and the trials and tribulations of the relationship between supervisors and students. Doctoral studies can be very stressful for students and for supervisors.

Our primary goal in writing this book is to share our own experiences, and provide information and resources that can help to improve the experience of doctoral training for supervisors and students. We all ourselves hold earned doctorates and have served as doctoral examiners many times over, in Australia and internationally. While most of our work has been undertaken within Australia, we have all had considerable international experience and have worked in various countries. We have successfully supervised doctoral students to completion in Australia, New Zealand, Canada, China, Indonesia, Thailand, the United States of America, the United Kingdom, Jordan, Saudi Arabia, Sri Lanka, Taiwan, Ghana, Nepal, Nigeria, Bangladesh and India. So, it is true to say our supervision work has taken us, quite literally, across geographical (as well as intellectual) borders. These supervision opportunities have greatly enriched us personally and professionally.

However, supervision is not an exact science. The question of how we learn supervision is a not straightforward. Pedagogies of supervision are not often discussed, and there can be an assumption that the same approaches we use for undergraduate or graduate students will work equally well for doctoral students. However, we believe that certain skills are needed to best support doctoral students, and we have reflected on how these are learned. There are a range of influences that shape our supervision practices – the supervision we ourselves had, various training and development processes we undertake through our employers, things we learn from colleagues along the way, and most of all the things we learn from our students. Through our own supervision activities, we have learned a lot about ourselves as supervisors. We have all experienced working with students with a range of life situations, experiences and learning styles. We have all experienced numerous occasions of supervising in the context of more complicated relationships, such as where the candidate is also a colleague and employed within the same department.

Over the years, our understanding of the pedagogy of supervision has developed and deepened in response to the different needs of our students. As supervisors, we witness (and ourselves experience) the gamut of human emotions – from moments of dejection and even despair through to the absolute joy we see in our students and their families and friends when they are successfully examined and

are able to graduate. As supervisors, we celebrate the gifts of mentorship, scholarship and sponsorship that keep on giving.

We have grown enormously personally and professionally through our supervision practice. We take constant inspiration from our own students, from sharing their joy in discovery and in witnessing the growth in skill and confidence over the course of their doctoral training. Solving complex problems in health and society is inspirational and a driving force. Over our careers as clinicians, researchers, educationalists and doctoral supervisors, we have developed communities of practice in our work and believe this model has been beneficial for building strength, scale and sustainability of the pedagogy of doctoral education.

We have greatly enjoyed putting this book together, and are delighted to share some of our experiences and insights with you through these pages. This book will be of use to all those engaged in doctoral training, including supervisors and also students. It is our hope that you enjoy this book and find it useful to you in your own doctoral supervision and doctoral studies. Importantly, we hope it will inspire reflective practice and curating of the pedagogy of doctoral studies. We welcome feedback and communication from our readers and wish you well on your own travels through doctoral education.

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**Debra Jackson**

**Patricia M. Davidson**

**Kim Usher**
August 2021
Sydney, NSW, Australia

# About the Book

In preparing this book, we have used a range of pedagogical features that we hope will make the text user friendly, engaging and relevant for our readers. We have used a mix of vignettes and reflective exercises and have also included a number of templates that help us enormously in our own work, and hope these will also be of use to you, our readers.

A lot of our own learning as supervisors has come from discussions with other supervisors, and we count ourselves as very fortunate to work in environments where we have had others to learn from and to talk to about our supervision practice. We are acutely aware that this is not the situation for everyone. So, we have included discussion boxes throughout the book. These discussion boxes capture discussions between us and also deliberations that students and others may have about us and about their work. We have included some further readings at the end of each chapter for readers who want to explore the topic further.

Students are central to the experience of supervision and so we have also included the voices and reflections of past and current students in the reflective comments that precede each chapter.

Finally, this is a book born of our own professional journey in doctoral supervision – in this book we share our own lived experiences over many years. We hope you will find our experiences useful in your own practice.

**Debra Jackson**

**Patricia M. Davidson**

**Kim Usher**

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# About the Authors

**Debra Jackson, AO, RN, PhD, FACN, SFHEA, FRCSI**
is a registered nurse, Professor of Nursing at the University of Sydney, and Professor Emerita at The University of Technology Sydney (UTS). She has a number of international honorary posts including Kings College London and the University of Bournemouth, and is affiliated with Ngangk Yira Research Centre for Aboriginal Health & Social Equity, Murdoch University. Professor Jackson has two decades of experience supervising research students and has supervised more than 45 doctoral students to completion. She is a highly productive researcher and has examined numerous doctoral theses. She has undertaken specialist micro-credentialing in supervision (2021 UTS). The quality of her supervision has been recognised through the awarding of the Vice Chancellors Award for Excellence in Research Training and Doctoral Supervision (2007 UWS). In 2019, Professor Jackson was awarded Officer of the Order of Australia (AO) for distinguished service to medical education in the field of nursing practice and research as an academic and author.

**Patricia M. Davidson, RN, PhD, FAAN, FAHA, FACN, FRCSI**
has been a registered nurse for over 40 years and joined the University of Wollongong as Vice Chancellor in May 2021. Prior to her current role, Professor Davidson was Dean of the Johns Hopkins School of Nursing in Baltimore in the United States. In 2021, she was the recipient of the Consortium of Universities for Global Health (CUGH) Distinguished Leader Award. This honour celebrates her exceptional contributions to the advancement of global health worldwide. As a global leader in nursing, healthcare and advocacy, Professor Davidson's work focuses on person-centred care delivery and the improvement of cardiovascular health outcomes for women and vulnerable populations. Across her academic career she has been actively involved in research supervision for more than two decades and is delighted to call her prior students collaborators and colleagues. She was the first nurse to receive the prestigious Australian Eureka Outstanding Mentor of Young Researchers in 2016. She was also previously a board member of the International Network for Doctoral Education in Nursing. As the world faces tumultuous changes socially, politically and economically, she firmly believes that education is a transformative force for good. The doctoral degree is a pathway to creating new knowledge, testing assumptions, and creating a healthier and more sustainable world.

**Kim Usher, AM, RN, PhD, FACMHN, FACN**
is a Professor in the School of Health, University of New England, NSW; Adjunct Professor at the University of Technology (UTS), NSW; and is affiliated with Ngangk Yira Research Centre for Aboriginal Health & Social Equity, Murdoch University. She has been an academic and researcher for over 30 years. During that time, she has supervised over 40 PhD students. Professor Usher continues to research and collaborate with many of these students. Recognition of the quality of her supervision was noted by the awarding of the 2009 Vice Chancellors (James Cook University) Award for Research Supervision Excellence and an Australian Learning and Teaching Council Citation for Outstanding Contribution to Student Learning (2008). In 2015, Professor Usher was awarded Member of the Order of Australia (AM) in recognition of sustained contribution to nursing and midwifery education and research.

# Introducing Doctoral Supervision

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### Student Reflections

*"There are so many things that my supervisors did to support me. They always held high expectations of me, and believed I was capable of so much more that I thought I was, and they demonstrated that in small and yet consistent gestures that affirmed my efforts and encouraged growth. One of the most helpful things my supervisors did was to recognise my learning style and way of working and accommodate that. Rather than trying to fit me into a particular model, they flexibly responded to the way I needed to work to be productive".*

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*"I realised that doctoral supervision was not only about written feedback and meeting deadlines. I needed someone could feel the human inside me when I needed non-academic support the most. My supervisors did their best to offer this support, or refer me to the right/expert person".*

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*"The biggest challenge came from the discomfort of not knowing anything. I was capable, confident and really excelled in my workplace. Suddenly as a student, I didn't know anything. Everything I was learning was new. Everything was a challenge. I didn't fully understand what it was to be a doctoral student. This led to a great loss of confidence in my overall ability. I now view this as an important part of the overall journey. Reflecting back, I think mentorship from early career researchers, who could easily recollect that sense of discomfort, and provided some reassurance that it was normal, would have helped".*

### Upon Reading This Chapter, and with Further Reflection, Readers Will

- Describe the importance of doctoral research to nursing and health science
- Explain the roles of supervisors in doctoral training
- Discuss supervision in the context of teaching and learning
- Elucidate some of the global issues in doctoral training for nursing and health sciences

## 1.1 Coming to Doctoral Studies

Doctoral researchers are very important to nursing and health sciences. Students engaged in doctoral training are generally undertaking a research-based degree that represents the most advanced of the postgraduate degrees. Completion of a doctoral degree provides graduates with the skills necessary to undertake all phases of a research project, from conceptualisation, through the conduct of the project in its entirety, and appropriate dissemination of results. But a doctoral degree is so much more than that. Earning a doctoral degree is a major achievement personally, professionally, and academically – we feel it is a life-changing degree. Holding a doctoral qualification not only contributes to the knowledge base that underpins disciplinary knowledge; it opens so many doors for graduates and positions them well to take the next exciting steps in their professional lives.

**Thought Box 1.1 MPhil to PhD Pathway**

In some situations, students seeking admission into a doctoral degree are enrolled initially into a Masters of Philosophy or similar master's degree and not directly into the doctoral programme. This can be for various reasons. In some countries and regions, this is commonplace and reflects the usual pathway to doctoral training. Sometimes it may be because the student does not have the necessary pre-requisites to get straight into the doctoral training programme. As an MPhil student seeking admission to doctoral training, there is an expectation that a student will develop familiarity with their research area and demonstrate the capacity to undertake a doctoral-level research degree. In these situations, students are generally able to apply for an upgrade to a PhD after 1 year of full-time study. The upgrade process will differ from place to place, but there is usually a requirement to submit written work and do a presentation or oral examination to a panel. The panel will be expecting to see evidence that the student is able to build on the work they have done for the MPhil to produce an original and scholarly contribution that will meet the requirements of the doctoral programme. Other considerations are that the student has the time to do this (both personally and in time remaining in the candidature) and the department has the resources to support the proposed project.

Through the candidature, graduates will gain skills and experience in many crucial and high-level activities such as questioning previously unproblematised and accepted information; formulating a research question or problem; planning a rigorous strategy to address that question or problem; locating, reading, critiquing, and synthesising literature to a very high standard; but also providing advanced understanding of applied methodology and applied research ethics. Completion of doctoral training prepares graduates for a career in research, science, and/or education and for other leadership roles in education and service sectors. In addition to the benefits of doctoral training to graduates, doctoral research is also important to the wider professions of nursing and health sciences, producing important original knowledge that will help to advance the professions and help us meet our responsibilities to patients, families, communities, and wider society.

Supervision is an important and satisfying activity for doctorally qualified nurses. As authors of this text, we are all ourselves active researchers and doctoral supervisors. Through our own experiences, we know that doctoral supervision can be an enormously satisfying and gratifying element of professional life for both supervisors and students. Supervision is an activity that has enriched us all beyond measure – it is an enormous privilege to walk alongside a student on their doctoral journey. It is also extremely rewarding to be active participants in the continued quest for new and original knowledge to help develop our disciplinary knowledge base.

However, as well as being enriching and rewarding, supervision can also be a source of stress, pressure, and anxiety. For supervisors, supervision involves continuously supporting learning and skill development with a student over several years and, because of this, is quite unlike most education models used in higher education, which tend to feature much shorter and more distant relationships between staff and students. For students, this is often the first time they have ever entered into this form of one-on-one educational relationship. Given the powerful position of the supervisor, students are often overwhelmed by the nature of the relationship and the expertise and position of the supervisor. The very nature of supervisory relationships and the fact they traverse so many years mean that supervisors are able to witness the growth and transformation of students, which can be incredibly rewarding. However, this same factor – the duration of the relationship – can also provide challenges and so requires an acute awareness of pedagogies and models that can support and assist student learning over extended periods of time.

The duration of the relationship can also present supervisors with challenges associated with maintaining the relationships (Jackson et al. 2021a, b). As with any relationship, tensions and challenges can arise over time, and these can be associated with all sorts of issues including authority, power, control, mismatched expectations, and a raft of other issues. Tensions such as these can complicate matters for both student and supervisors, and so it is important to be alert to the development of tensions and to be able to work through any issues, with strategies grounded in professional, respectful, and authentic communications. We will talk more about these issues as we move through this book.

In this chapter, we introduce the reader to some of the major contextual and foundational information needed to underpin effective doctoral supervision. We consider the elements and characteristics of a doctoral degree, the roles of supervisor and student, teaching and learning in doctoral education, global issues in doctoral education, models of doctoral training, and special considerations for nursing and health sciences.

## 1.2 What Are the Elements and Characteristics of a Doctoral Degree?

A doctoral degree involves training in research and preparation for a career as an academic, scientist, scholar, and clinician scientist. Increasingly, the doctoral degree is also taking individuals into non-academic careers. The doctoral degree is characterised by a sustained body of work that provides a unique contribution to disciplinary knowledge. There are various ways of undertaking and presenting a doctoral degree – some doctoral degrees are submitted as a classic thesis, others as a portfolio of work, some as a series of published stand-alone papers, and still others as a hybrid of these. However, regardless of mode of presentation, they generally involve a single study or a set of interrelated studies that seek to address a question or issue of relevance to their discipline.

Doctoral students are often at the front line of generating the knowledge needed to address the contemporary issues facing nursing and health care, and one of the particular elements of the doctoral degree is that new and original conceptual, theoretical, and/or applied knowledge is developed. This can involve the generation of new information that contributes to some aspect of disciplinary knowledge. The doctoral degree can also involve challenging and contesting previously unproblematised aspects of nursing and health sciences and producing evidence that casts new light on older problems or issues.

Doctoral opportunities can take different forms. Sometimes opportunities arise when established teams with research funding carve off elements of funded studies for a doctoral student. However, while common, in our experience, most students in our fields come to doctoral studies, either on a scholarship or as a self-funded student, to work in an area in which they have a professional interest. Whatever form the opportunity takes, the crucial considerations for both supervisors and potential students are that the projects are able to be achieved within the period of candidature, meet the criteria to be awarded a doctoral degree, make a meaningful contribution to disciplinary knowledge, and align with the human, economic, and methodological resources available to the research team.

## 1.3 The Roles of Supervisor and Student

Undertaking doctoral education is a major decision for students and one that involves a considerable commitment over many years. During the course of doctoral education, students not only learn and apply advanced research methodologies to create new knowledge and insights; they learn the discourses and practices of their disciplines. Very importantly, they also learn how to communicate research findings in ways that meaningfully contribute to disciplinary knowledge. Students also learn skills in searching, locating, critical reading, and synthesis of literature. Doctoral candidates are tasked to write to a high standard of rigour and sophistication, and facilitating the development of writing skills often requires considerable and sustained input from doctoral supervisors (Jackson 2009). This ability to synthesise and interpret vast amounts of information is a highly valued attribute of doctoral graduates.

The word supervisor in lots of ways is fairly self-explanatory, with its connotations of being observer, overseer, and regulator; and indeed, oversight and regulation is the expectation of many universities. Doctoral education occurs within a model that has evolved from an apprentice style. In some parts of the world, the term advisor is used synonymously. Traditional supervisory models tended to position students within a deficit framework – in other words, supervisors were viewed as holders of knowledge and students positioned as those needing to be managed and regulated. In this way, the knowledge students brought to the table was not recognised or, if recognised, undervalued. However, in the context of today's doctoral education, the supervisory role is far more nuanced and complex. Supervisors need to have at least a working (if not expert) knowledge of the student's discipline area and expertise in relevant and appropriate research methods. Hence, there is a

need for supervisors to have research currency so as to be able to best support the student throughout every aspect of the project. As there is an increasing emphasis on team science, the supervisor often configures a supervision panel drawing upon methodological and domain-specific expertise.

Today's supervisors take on a multifaceted role with elements of mentoring, coaching, providers of critical feedback, guide, supporter, advocate, and colleague, in addition to the classic roles of oversight and regulation. These latter roles can be seen in the strategies enacted by many institutions to encourage timely completion. Furthermore, there is increased recognition of the knowledge and perspectives students bring to the table as well as drawing on institutional expertise, such as informationists and writing support.

Over the course of the candidature, the role of the supervisor will likely change and evolve. Obviously, as the student progresses, we are looking to see the development of skills such as developing ownership over work and increasing abilities at self-critique and reflection. Early in the candidature, students generally need assistance in articulating and refining research questions and problems, developing timelines, time management, suggestions for further readings in the field, research design, and learning the academic conventions of the discipline. However, as they progress, student learning and support needs will change to issues such as data collection and management, data analysis and synthesis, data storage, and writing up. As students negotiate research sites, ethical approval, and relationships with collaborators, they also need additional support.

Students most often come to doctoral studies not fully knowing what to expect and looking for guidance around how to establish and construct the relationship with supervisors. They may be unsure of the boundaries of the relationship, and so it is very important to ensure that from very early on in the relationship, discussions around boundaries, such as how and when to make contact, are discussed so that all parties are clear on the boundaries of the relationship. These may need to be revisited at different points during the candidature. We will explore these aspects further in later chapters of this book.

Students can often feel quite isolated as doctoral students, and this can be partly a result of the way doctoral education is constructed and delivered. Where other forms of learning feature students being placed into tutorial groups or similar, providing opportunities to interact and form friendships with other students, many doctoral students do not have these opportunities, and so ways of helping students to engage with the wider university community can be issues for supervisors to consider. Directing students to institutional services can be particularly important – universities generally have social and other services available to support students in all manner of situations, and supervisors are wise to refer to these as needed. We have found that embedding opportunities for students to engage with other students and institutional services into our supervision pedagogy has greatly assisted students in many ways, and these will become apparent through the chapters of this book.

**Reflective Activity 1.1**

Consider the scenario below, and reflect on the questions.

Rhama is a nurse who has just completed her PhD on the topic of vaccination. Rhama's PhD was a traditional PhD – a mixed methods study generating four publications, submitted at various points of her doctoral candidature. Rhama successfully applied for a job as a lecturer in nursing and is due to start at the beginning of the academic year. On being offered the job, Rhama was told that doctoral supervision is an expected part of the role and that on appointment will immediately be allocated onto two existing doctoral supervision teams.

1. What preparation could help Rhama take on this new role?
2. What information will help Rhama to best support the students and the supervision teams she is joining?
3. How could Rhama best contribute initially as a new member of existing teams?

As discussed above, most students have more than a single supervisor with models featuring two, three, or more supervisors (or advisors) allocated to each doctoral student. In some countries, such as the United States, a committee is configured to guide the student. Forming this team is very important – particularly to ensure that the team has the right blend of skills and expertise to meet the particular needs of each student and the requirements of their projects. We will focus more closely on this in ►Chap. 3. Once the team is formed, it is important to consider the quality of the relationships within the team and how these relationships are constructed. Like other relationships, factors such as respect and authentic communication are key and especially so given that the supervisory relationship often involves the provision of considerable and ongoing feedback and critique. It is very important to create the right environment for this to occur – an environment that will help the student to thrive and grow as a scholar and scientist and move towards the ability to be able to self-critique and recognise the strengths and weaknesses of their own work. We will focus more closely on these relationships in ►Chap. 4.

## 1.4 Teaching and Learning in Doctoral Education

The term pedagogy refers to the frameworks within which teaching and learning occurs and covers both the theory and practice of the educative process. However, the pedagogy of supervision is often assumed, with the idea that the past, unexamined (rather than evidence-based) ways of supervision are effective. This means that supervisors may uncritically base their own supervision on the style they received themselves. While supervisors in many universities are required to undertake generic compulsory training sessions, these are often focussed on policy and on strategies for oversight and regulation of the candidature, and the pedagogical aspects of supervision are generally not a focus (Jackson et al. 2021a, b).

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**Reflective Activity 1.2**

Consider the scenario below, and reflect on the questions.

Christine is a tenured Professor of Health Sciences and has extensive supervision experience and a full portfolio of students. The university she works in has recently lost a number of experienced staff due to retrenchment and retirement and is hiring new, less experienced personnel. Christine has lost some colleagues from her supervision teams due to retrenchment and has now been advised she needs to take new staff on to supervision teams including Rhama who has been allocated onto two of Christine's student teams and Blake who is a clinical physiotherapist.

1. What could Christine do to help Rhama and Blake take on this new role?
2. What information will help Christine to best support Rhama and Blake and ensure the students get the full benefit of Rhama and Blake's expertise?

However, effective doctoral supervision involves a sophisticated pedagogy and sound understanding of teaching and learning processes as well as research methodology. In this context of doctoral supervision, pedagogy has been described as "intentional and systematic intervention that acknowledges the problematic natures of relationships between teaching, learning, and knowledge production as integral to supervision and research studies" (Zeegers and Barron 2012a:20). As we have previously mentioned, doctoral supervision is framed within ongoing purposeful relationships between supervisors and students, and Lusted (1986a:3) recognises this through his construction of pedagogy as involving "the teacher, the learner and the knowledge they together produce". This definition captures the importance of the relationship and highlights the joint intellectual work that is produced within and through that relationship. So, clearly, supervision is pedagogy, and this pedagogy informs everything that occurs within the relationship. Supervision involves structured instructional techniques and is a relationship-based form of pedagogy. Within those pedagogical relationships, various supportive strategies and structures can be in-built to enhance learning and skill development. Furthermore, carefully crafted pedagogical strategies will also contribute to students having a sense of belonging and reduce student isolation. We will talk more about pedagogy in relation to doctoral training in ▶ Chap. 2.

## 1.5 Global Issues in Doctoral Education

As researchers and scientists, we increasingly work in contexts of internationalisation and globalisation, and this is also seen in doctoral training. Many students travel internationally in search of doctoral training. Some students enrol in universities in one country, but their actual doctoral research and other activities including writing and dissemination are undertaken in a different country. Other students move countries in order to access quality doctoral training. This can be

because higher-level degrees in nursing and health sciences are not available in their home country, because the supervision and resource expertise (i.e. equipment) may not be available to them in their home countries, or because the student wants the experience of enrichment that is presented through studying internationally.

### Thought Box 1.2 Time Management

Supervision represents a major time commitment in already packed diaries. It can be useful to take the time to consider diary management to ensure adequate time for supervision. There are various ways of doing this. One way is to set aside a day of the week or month (depending on student load) on which student matters are privileged – say the second and fourth Wednesdays of every month. These days can then be quarantined in the diary for student consult and other student matters. All student meetings are then on that day and can be set for the whole year with one email (rather than setting meetings individually with the back and forth emails this can entail).

### Conversation Box 1.1 Mentoring New Supervisors

**Debra:** An important part of my role as a supervisor is to mentor and support new supervisors. However, I have learned that it is very important to be clear with the expectations as some new supervisors I have worked with have not prioritised the activity enough and seem to be uncertain about their responsibilities to the student. Therefore, I make the time to meet with the new supervisor to ascertain their experience to date and to be clear about our team's expectations of participation, meeting deadlines and ensuring our students know preferred means of contact and other essential information. I also make sure to be in contact regularly with the team so that the new supervisor and other team members are able to raise any issues and reflect on various issues as needed. Wherever possible I try to involve current doctoral students in supervision so that they can develop the skills in critical reading, feedback and other skills that will assist them as they take the next steps in their own careers.

**Kim**: I mostly enjoy mentoring new supervisors but at times, I have found it challenging. One new supervisor approached the role as if she was also a student. For example, she sat in meetings taking notes and hardly ever interacted in meetings or gave input or feedback to the student. It made the role even harder for me and the other team members and the student eventually also became dissatisfied with this as she progressed.

**Patricia**: Welcoming and mentoring new supervisors to the team can be a stimulating experience. As in all collaborative encounters establishing norms and accountability is important. Often newer supervisors can be more critical than more experienced colleagues. Taking the time to discuss that the doctoral journey can be sometimes complex and convoluted and appreciating setbacks as well as successes is important.

In these situations, supervisors and students also need to consider cultural issues and social issues such as access to support. Language skills may be a challenge to students for whom English is not their first language. Students may also be located away from family support and have little resources for emotional and other support. From a pedagogical point of view, there can be cultural differences in expectations of the teaching and supervisory process resulting from past experiences and dominant educational philosophies in their home countries. Supervisors should be aware of the impact of colonialism in many countries and be thoughtful and intentional in addressing deficit models that have often framed research problems. These are important factors for supervisors to consider.

In addition, students may be commencing doctoral work at the same time they are trying to establish in a new country, and so a degree of pastoral care may be needed. It is important students are aware of the support options made available by the university they are enrolled in and that they have the confidence and knowledge to access these. Many universities have special social support programs and active international student communities, and these can be extremely valuable sources of support for students, newly arrived and as they progress through their studies. We do encourage our students to actively participate in relevant activities offered by the university community and have found participation in such activities can at least partially mitigate the loneliness and homesickness that can be an issue for international students. International and cross-cultural supervision issues are discussed at more length in ▶ Chap. 7.

## 1.6 Special Considerations for Nursing and Health Sciences

Unlike many campus-based disciplines, nursing and health sciences doctoral projects often have a strong clinical component. This component has considerable implications for the conduct of the student candidature and often involves quite major work for students including issues around a need for ethics approvals from multiple sites and sectors, most often both university and clinical sites, as well as issues around access and recruitment to clinical sites and community engagement. These factors need to be considered when identifying a supervisory team or panel of advisors for students.

Also, many students pursuing doctoral education from nursing and health sciences backgrounds enter through a non-traditional academic route. They may have extensive clinical experience but have far less academic experience and even may have quite low research literacy. For students, this can cause quite a lot of stress particularly early in the candidature, as there is often a need for completion of qualifying units of study and extensive reading to prepare them for candidature. For some students, this lack of preparation through prior education can leave them thinking they are not progressing at the rate they should be. In addition, other aspects can also be challenging for students who have been away from study for some time, particularly where they hold a senior clinical position. For these stu-

dents, the feedback process can be particularly challenging (Jackson and Cleary 2011). We will focus on feedback and feedforward in more detail in ▶Chap. 5.

## 1.7 Charting a Plan for the PhD

**Reflective Activity 1.3**

Consider the scenario below, and reflect on the questions.

Blake is a physiotherapist who works full time in a large acute hospital. He sees a range of inpatients and outpatients, but his special interest is in palliative care. He finished his Masters in Palliative Care by coursework and dissertation last year. He holds an adjunct role at the local university and has been asked to take on the role of clinical supervisor for a doctoral student studying fatigue in cancer patients.

1. What preparation could help Blake take on this role?
2. What information will help Blake to best support the student?

On completion of doctoral training, graduates are expected to be able to plan and conduct a major project from beginning to end. Time management and good planning are essential elements of this skill set. From the commencement of candidature, it can be very useful to plan how time will be used over the candidature to ensure that all elements of the thesis are completed within the permitted timeframe. At many universities, this process forms part of the application, and once admitted to candidature, it can be very useful to further develop this, to add more detail and nuance to the plan.

We find it can be very helpful for students to review their thesis plan at the beginning of each semester: to consider what they want to achieve and outline time-linked objectives that will go towards achieving the goals. Having a detailed plan that is frequently reviewed has many benefits. Such a plan is very helpful as students learn to really manage their time. It also helps the supervision team and student recognise where there are delays or issues impeding progress (in a very timely way) and is very useful when doing progress reports and other milestone measures. A template can be useful to assist in this activity (see ▶Template 1.1 – Thesis plan). Each of the boxes in the template can also provide a beginning template for the semester-by-semester template.

When beginning the doctoral journey, it can be quite difficult for commencing students to visualise what their finished work will look like. Furthermore, as previously mentioned, coming to doctoral studies requires a degree of independence and an ability to be self-directed. There is a need to pace activities to ensure all elements of the work required for the degree to be awarded are conducted to a particular level and within the specified timeframe. In order to help with these factors, we also encourage students to use a thesis map (see ▶Template 1.2 –

Thesis map). The thesis map can be very useful to help students consider factors such as how to use their word budgets and to develop an individualised timeline for themselves to help with time management (Jackson and Cleary 2011). We also encourage students to view the thesis map as a living document that will provide an easily accessed picture of where the student is at, at any given time in their candidature.

## 1.8 Health and Safety Issues in Doctoral Training

When undertaking or supervising a PhD, the health and safety of all personnel, including students, is a very important consideration that must be negotiated early in the study plan. Some of these negotiations occur as part of the milestone and ethics processes; but it is an essential discussion that should be undertaken early so that any risks can be identified and managed. Considerations around the health and safety of the research team are an important part of the research planning process. The issue of health and safety as it relates to research must be addressed by the university in order to meet legislation requirements in the area. Supervisors and students are responsible to become aware of the processes, procedures, and practices set out by their university and ensure these are followed at all times. For example, there are generally responsibilities to maintain safety of self and others; have awareness of relevant legislation and local policies (as well as country, local, and university legislation and policies, this must include areas where the research is to be conducted); attend available training; adhere to regulations; and report incidents that occur or safety issues within the environment. Supervisors should closely monitor health and safety issues that could affect their students, and these should be regularly reviewed. We suggest health and safety be a regular meeting agenda item, especially at the planning phase, the ethics application preparation, and before and during data collection for field work students. For laboratory-based students, this must remain a regular agenda item.

**Reflective Exercises**

Reflect on the content of this chapter in considering the following questions:

1. What was your own experience of being supervised?
   (a) What were the most useful elements?
   (b) What were the least useful?
2. How has your own experience of supervision influenced your own attitudes towards doctoral supervision?
3. What strengths and weaknesses do you bring to doctoral training?

## Template 1.1 Thesis Plan

| Activities | Key dates | Notes |
|---|---|---|
| Initial planning phase: research question (RQ) refinement; scoping of relevant literature; proposal refinement; commence regular supervision meetings; attend university HDR student induction; review all relevant HDR policies and procedures | | |
| Develop literature review protocol; consider resource requirements; decide on the type of review suited to RQ; identify methods and determine who will assist with extraction and appraisal; meet with the librarian; conduct literature review; write as paper for publication or traditional thesis chapter; continue to refine proposal; select research tools if relevant; develop initial decisions on analytic techniques; submit literature review paper | | |
| Develop ethics application; develop safety protocols for data collection; prepare confirmation document; plan conference presentation(s) and submit abstracts as necessary; present confirmation seminar | | |
| Submit ethics application; make any confirmation panel recommended adjustments to proposal; plan data collection-contact agencies, partners, etc.; and organise access to participants, laboratories, hospitals, etc. | | |
| Make any necessary ethics adjustments; submit to further ethics committees if needed; expand theoretical and methodological position; and write sections for relevant chapters | | |
| Commence data collection; refine proposal methods and start to prepare as a chapter; prepare and submit annual progress report; take annual leave (end of year) | | |
| In some cases, you will need to continue data collection (mixed methods study or laboratory studies, e.g.); analyse data; prepare and submit annual report; prepare and submit final ethics report; prepare and submit annual progress report; *take annual leave* (end of year) | | |
| Draft publication proposal for results papers if PhD by publication or start to write traditional thesis chapter(s); write draft papers for feedback or send chapter(s) for feedback; address feedback; submit papers as relevant; submit plan for thesis completion to supervisors; arrange meeting with supervisors to identify and discuss potential examiners | | |
| Apply for extension if required; develop plan for discussion chapter; draft discussion chapter – may have a resulting paper if PhD by publication; prepare for oral defence or final pre-completion seminar if required | | |
| Submit thesis for examination; store data according to university policy; prepare and submit annual progress report; *take annual leave* (end of year); revise thesis after examiner feedback received and resubmit; submit any final papers or corrections; apply for graduation | | |

1

## Template 1.2 Draft Thesis Map

**Name:**

**Consider word budget:**

| | Title | Purpose | Sources | Words | Due date | Comments |
|---|---|---|---|---|---|---|
| 1 | Introductory chapter, outline of the thesis | Sets the scene and establishes the extent of the problem/issue | Statistics, news media, grey literature, reports, opinion pieces, etc. | | | |
| 2 | Literature review | The state of the science. What is already known. Justifies the study. Informs the (finessed) final aims of the study | Peer-reviewed literature | | | |
| 3 | Methods and methodology | What are the ideas underpinning the work? Why this approach? What am I going to do? How am I going to do it? Ethics Recruitment Data collection and analysis | Peer-reviewed literature | | | |
| 4 | Findings | Present original findings, describing sample, etc. | Primary data only | | | |
| 5 | Findings | Present original findings, describing sample, etc. | Primary data only | | | |
| 6 | Discussion | Situation own findings in relation to the current | Discussion in relation to what is already known | | | |
| 7 | Concluding chapter | Recommendations for practice, for education, and for further research Limitations and strengths of the study | | | | |
| 8 | References | | | | | |
| 9 | Appendices | 1. Search strategy 2. PROSPERO registration 3. Ethics approval letter 4. Participant information material 5. Advertisement | | | | |

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### Further Reading

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# Doctoral Supervision as Pedagogy

## Contents




D. Jackson et al., *Successful Doctoral Training in Nursing and Health Sciences*, https://doi.org/10.1007/978-3-030-87946-4_2

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### Student Reflections

*"My supervisors encouraged me to see the PhD as a training degree where I was encouraged to learn and grow. This meant that they encouraged me to put my thoughts on paper or talk them through but then use critical feedback to develop my ideas. This was helpful as it kept me on track and focussed. It also gave me the confidence to explore ideas and skills in a nurturing environment where I felt safe and encouraged".*

***

*"It feels like there is a general lack of awareness of the skills and qualities needed to supervise students at the doctoral level. Doctoral supervision sits in the space between teaching and research and I think there is a view that any researcher can supervise but that view disregards the importance of the pedagogy of supervision which at my university is never discussed, addressed or acknowledged. For me, supervision is primarily teaching and learning and requires a clear and robust pedagogy to inform it".*

***

*"The most helpful thing was meeting regularly to talk about ideas in relation to my work. If I did not have this time to think aloud with my supervisors, I would not have given my topic justice. Through conversations I became more confident about my topic and developed my ability to share my findings and thoughts in a much more succinct manner. This confidence boost helped me step out of my comfort zone and discuss my topic in a lot more detail with a lot more people, helping me to disseminate my work both nationally and internationally".*

**Upon Reading This Chapter, and with Further Reflection, Readers Will Be Able to**

- Articulate supervision as pedagogy
- Describe strategies to support doctoral students within a pedagogy framework
- Explain the role of learning theories in doctoral training
- Describe the ways that pedagogy of supervision can contribute to creating robust environments for students and supervisors of all levels
- Identify elements of pedagogy that can adequately support students

## 2.1 Supervision as Pedagogy

In ▶ Chap. 1, we introduced the idea of supervision as pedagogy – the art and science of the teaching method. Considering doctoral supervision as a pedagogy is important because it draws attention to the process by which knowledge is created and for supervision to succeed (Lusted 1986; Walker 2010). When we discuss pedagogy, we are referring to not only teaching but also how material is taught, how the student learns, the contexts in which the learning takes place (Lusted 1986), and the style and practices of the supervisor. Brown and Atkins (1990) proposed a matrix involving two axes to better understand supervisor styles. These axes map the ability of the supervisor to relate to the student, with either warmth or distance, and the structure of the supervisory sessions. They propose that the style least

favoured by students is where supervisors are cold and have no structure to supervision meetings. Even though this work is now more than 30 years old, we believe it is still current because our experience tells us that warmth and ability to relate to students, along with appropriate structure to support meetings, continue to be crucial variables for students that impact their experience and eventual outcomes.

Supervision requires particular forms of pedagogy, because in addition to gaining high-level skills in research and inquiry, the aim is to encourage students to independence, to help them confidently find their voice, to support them to question and challenge, and to set them up for the next steps in their careers (Jackson et al. 2021a). Therefore, it is important that teaching and learning activities help to develop these attributes. While a certain amount of direction and guidance is needed, it must be remembered that the project is the students' work and their vision for their own work is important.

We believe that the pedagogy of research degree supervision needs to be given the same recognition as that of undergraduate teaching. After all, we are still dealing with students and need to consider their needs and challenges as they enter and progress through the doctoral journey and support them by applying a humanistic and compassionate pedagogy to assist them to become mature, independent, and capable researchers. To do this, we need to enable students to participate in knowledge communities and engage within their field of research. Increasingly, we are seeing universities provide more infrastructure and accountability around the doctoral journey.

In the context of doctoral supervision, pedagogy involves deliberate, planned, and systematic interventions to facilitate learning and the generation of knowledge while recognising and supporting the relationships integral to doctoral studies. Unfortunately, pedagogy has been rather absent in previous accounts of higher degree supervision (Johnson et al. 2000). Within the original apprenticeship style model, what went on between student and supervisors received little scrutiny and was largely seen as private. However, the current focus on timely completions that many universities have adopted has changed that. With the pressures for timely completions, the pedagogy and the relationship between the student and supervisor have been afforded critical attention. This attention has resulted in various strategies designed to support the oversight and regulation of the candidate and ensure that supervisors have basic familiarity with relevant policies and procedures. While these are crucial to successful supervision, we argue that a focus on developing skills, networks, and competencies are equally important. Considering graduate attributes is just as important as completing a discrete piece of work. As graduates increasingly embrace non-academic roles, this is becoming more important.

In this chapter, we will articulate supervision as pedagogy and consider the role of this prospective and intentional process in creating enabling generative environments for students as well as for supervisors with a range of different experience levels. We will describe pedagogical strategies to support doctoral students and provide some examples of pedagogy in action from our own supervisory practice, including ways that pedagogy of supervision can contribute to creating robust environments for students and supervisors of all levels.

**Conversation Box 2.1 What Does Pedagogy Mean for You in Your Supervision?**

**Debra:** To me, pedagogy of supervision refers to all of the formal and informal teaching and educative components of doctoral training. But it goes beyond that, to the environment the student is in, and so I think about things like supportive community processes through which we can provide discussion groups, various forums to ask questions, opportunities for students to take questioning about their work, to see how they respond to having their ideas challenged. For me, an optimal pedagogy of supervision involves the creation of a community of scholars of all levels. Doctoral students need to have access to a range of teaching activities and learning opportunities across the term of the degree and so an effective pedagogy of supervision has to be able to provide these. It is also important to be clear about roles and to ensure that everyone knows what is expected of them.

**Kim:** I go back to my own experience of the traditional "master and apprentice" style of supervision that I was subjected to and remember the stress I experienced prior to supervision meetings. When I began supervising students, I did not want them to feel that way so I have tried many ways to develop my pedagogy to better suit the needs of the students. Students come to doctoral studies with many different learning needs and background so within my own pedagogy of practice, I am able to adjust my interventions to support the individual needs of each student.

**Patricia:** The pedagogy of doctoral supervision is built upon a platform where expert knowledge, networks and a spirit of co-creation generates a supportive and enabling environment for the candidate. Within this milieu there needs to be a cognisance of power relationships as well as setting out mutual expectations and accountabilities. Using tools to monitor and assess progress is important.

## 2.2 Supervision Pedagogy Central to Creating Enabling Generative Environments

Previous supervision pedagogy has incorporated overtones of overseeing – that is, looking over the production of knowledge and identity. As outlined by Zeegers and Barron (2012a), this attitude implies that the supervisor is the holder of knowledge which they then pass on to the student. We support Zeegers and Barron (2012a) in their suggestion that this notion of pedagogy has a total disregard for the student's prior learning and casts the student in the position of an "ignorant other". In our own practice, we recognise the strengths, insights, and experiences students bring to the supervisory relationship. After all, students are required to demonstrate high academic achievement to gain entry to higher degree programs, and many in nursing and health sciences also come to doctoral work with enormous clinical expertise and experience.

More recent conceptualisations of the supervisor-student relationship have challenged traditional perspectives. Post-modern, post-colonial, and feminist

perspectives have influenced and reframed supervision as a more collaborative process or partnership rather than a power-based one-way relationship (Hemer 2012). These new perspectives are able to be seen in pedagogical strategies that:

- Encourages critique and decolonising of curricula
- Values creating the spaces for students to question and challenge
- Acknowledges and accepts doubt
- Critiques the dominant orthodoxies
- Works in partnership and collaboration with others including relevant social, cultural, and community groups

From our perspective, the role of supervision is not to take over and manage the project for the student; it is to help the students to grow towards greater independence – to learn to develop and manage a project for themselves. Supervision therefore should be considered as a dynamic and collaborative process, designed to increase the knowledge and skills of both student and supervisor. However, while both parties should benefit and grow through the pedagogical relationship, we must never lose sight that the primary focus is on the development of the student. Through their candidature and skilled supervision, doctoral students have opportunities to develop high-level skills, to identify and adopt new ways of knowing and being.

To be optimally effective for doctoral supervision, pedagogy needs to be enabling and generative, be able to encourage independence and curiosity, recognise and support the importance of the relationships involved in the supervision, and facilitate the development of skills that will support satisfactory completion of the degree, to the high standard required for doctoral-level work. The task for the effective supervisor is to consider how to create and operationalise a pedagogy that will support the student to meet the requirements of the doctoral degree, help prepare them for life in the post-doctoral period, support the supervision model, and provide opportunities for supervisors to develop and refine their supervision skills. We have found it can be useful to use a template to reflect on the teaching and learning activities we provide for students to foster their intellectual and professional growth (see ► Template 2.1 – Teaching and learning practices for doctoral supervision).

**Conversation Box 2.2 Inclusivity in Pedagogy**

**Debra:** It is important to develop a pedagogy that can bring the students together and meet the needs of students across the different stages of their candidature. One of the strategies I have is to encourage students to form learning dyads with students at the same or a similar stage of candidature. I encourage them to look at their dyad partner as a special doctoral "buddy", someone who will accompany them on the doctoral journey and with whom (all going well) they will graduate. Over the years, I know many of the students have really benefitted from and grown from the relationships they have had with their "buddies" and I am aware that many of these relationships have endured over time, and both parties in the dyad continue to have caring and supportive relation-

ships with each other, beyond the years of their doctoral study.

**Kim:** When COVID-19 arose, we were sent home from the university and instructed to work via the internet and computer. I was worried for my students as some were going to be at home and very much alone. I decided to start a Monday morning catch up that I thought would be a way of keeping an eye on everyone's wellbeing. I sent a Zoom(c) invitation to all of my students, those for whom I am principal and co-supervisor, inviting them to attend a voluntary and additional meeting with me and the other students that would be in addition to their second weekly meetings that would now be hosted on Zoom. I was amazed that these meetings became very popular with most students attending every week. The meetings changed over time to be a teaching and learning exercise rather than a wellbeing catch up in which all members participated freely. It is now a crucial element of my personal supervision pedagogy. The more advanced students guided the newer students through various activities, debates and challenges ensuring their entry to higher degree study was not an isolated experience. As the group continued, I found my role became of less importance, and the students turned the opportunity into what we decided was a community of scholars where everyone felt confident to ask for help, raise issues and share experiences. One student said this was more what she expected when she enrolled in a higher degree so she was pleased that the pandemic had provided that opportunity for dialogue and debate.

**Patricia:** Looking at group supervision, almost a community of practice, can be really useful in developing a supportive environment as well as shared knowledge and resources. It also prepares students for the real world of team science. A community of practice accommodates different learning styles and individual circumstances, which I see as being very important. Appreciating differences and not judging is really important in appreciating diversity. I also consider the group dynamic can be generative as students assist each other in literature reviews and data collection as well as peer support. Mechanisms of accountability are important to address within the collaborative group.

## 2.3 Developing Inclusive and Kind Pedagogy

Though students come to the work with varying experience, strengths, and skills, all are required to meet the degree requirements, and so ideally pedagogical activities should be able to meet diverse student needs. All too often, structural factors such as social class, gender, and cultural and disciplinary backgrounds are not adequately considered in the context of pedagogy. This is despite the evidence suggesting all of these factors play an important role in students developing an academic identity (Gaston and Duschinsky 2020). Beyond appreciating these factors,

supervisors have to consider unique challenges faced by individuals. Some students have many pressures on their time with other professional and family caring responsibilities. While at some universities there may be some restrictions on the amount of work students are permitted to do (particularly if they are in receipt of a scholarship), many students also engage in paid work while in doctoral training. While this may well be a necessity for many students, there is some evidence that the amount of paid work undertaken by students can have a deleterious effect on degree progression, as time commitment to the research is of paramount importance to successful and timely progression (Martinsuo and Turkulainen 2013). Therefore, it is important for time commitment to the doctoral study to be overtly addressed early in the candidature.

Another key point to consider when considering pedagogy in supervision is the evidence that suggests doctoral students experience varying degrees of isolation because of the traditional structure of their degrees which is unlike other forms of course structure that are based around group models of learning. Isolation can be a problem for doctoral students (Wilson and Cutri 2019) and could be a factor in reports about mental health difficulties noted among doctoral students (Lau 2019). Mismatch of perspectives is also an issue for doctoral supervisors when thinking about pedagogies of supervision. It is important that students are familiarised with the pedagogies of doctoral training because these are likely quite different to previous educational activities, particularly for those students who have previously considered education as something to be passively received (rather than actively pursued).

We advocate for a kind and inclusive pedagogy, one in which all students are valued regardless of their stage of candidature and where there is an appreciation of the unique contribution that each student can make to the research community. We work to create a respectful and welcoming milieu and encourage students to have a voice in the development of group rules and mores and in all learning activities.

## 2.4 Elements of Pedagogy for Supervision

Over the years of our supervision practice, we have developed a pedagogical structure to support the success of doctoral students that is underpinned by the following factors (see ◘ Fig. 2.1):

1. Recognises and addresses individual student social, cultural and learning needs
2. Supports the development of the doctoral relationships, including student/supervisor, student/student, and supervisor/supervisor
3. Fosters social networking
4. Promotes skill development
5. Optimises instrumental support in terms of funding and resources
6. Applies sponsorship to provide access to opportunities
7. Adopts community processes

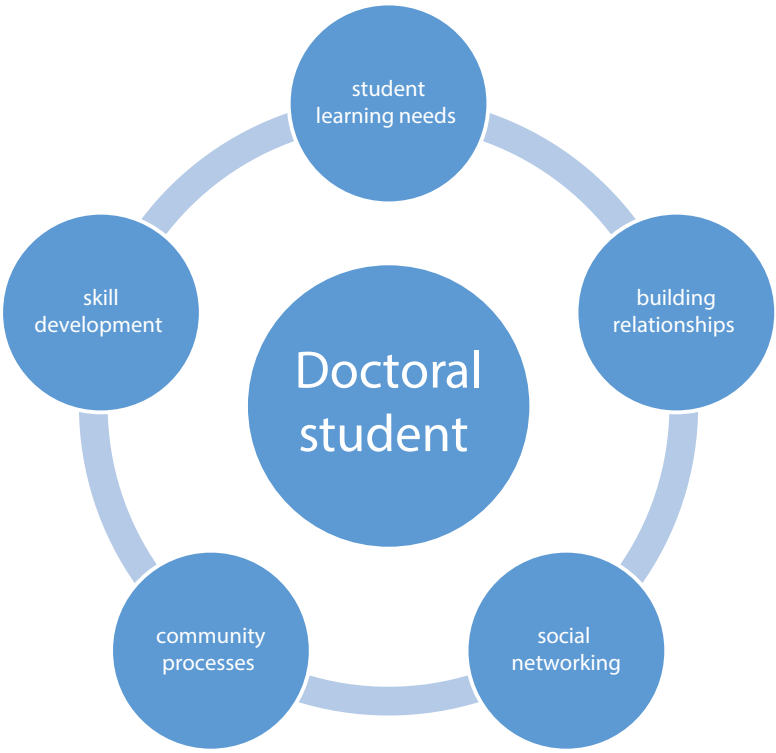


**Fig. 2.1** Factors to considering when developing pedagogical structures to support student success

Considering all of these factors and developing pedagogy that recognises the importance of these factors also creates a framework for supervision that supports the inclusion of colleagues with varying levels of supervision experience (Jackson 2008a). Such a framework also allows for strategies such as:

- Establishing and maintaining preferred modes of contact
- Setting goals and targets for each semester, month, and even week
- Initiating activities to build skills and confidence in students
- Creating opportunities for students to engage with one another
- Forming appropriate relationships (such as learning dyads and buddies such as outlined in ▶ Conversation Box 2.2)
- Participating in appropriate community activities such as journal groups and writing circles or other activities that will facilitate the development of essential skills

Framing supervision within a community of scholars where individuals share mutual learning goals is one way of providing a framework that will support student development and meet the essential requirements of doctoral pedagogy as articulated in Fig. 2.1 – addressing student learning needs, supporting relationship building, fostering social networking, and creating opportunities for skill development, all within a supportive community framework.

It is important to frame activities that students of all levels can participate in, and it is not difficult to do this. Activities in which students at varying points of candidature can share ideas and learn from one another are particularly useful, because they help students to develop confidence in their growing knowledge, and such activities can be very inspiring and motivating to students. A community framework also provides a ready source of collegial support and critique and provides support for members at different stages of their degree where more knowledgeable or advanced members can assist with individual and community outcomes. Framing activities in this way also provides opportunities for students to develop their leadership skills as they can take leadership of activities such as journal club, discussion groups, and other like activities. In this case, the supervisors become the mentors and supporters of the community of practice while also being members of the group.

## 2.5 Community Processes

In our own practice as doctoral supervisors, we have found community of practice processes to be very useful for both scholarly activities and promoting effective communication and other "softer" skills (Jackson 2005a). Because of our own experiences, we advocate the use of community processes wherever possible, as this is a way of meaningfully including all members of the supervision team in the design and implementation of pedagogical structures. Such approaches support both individual and group supervision models and help to build confidence of new supervisors through providing avenues that will allow them to draw on their knowledge and skills to authentically contribute to student learning.

Group activities are particularly useful, and elements of learning theory can be embedded within group activities. There are a number of adult learning theories that can be useful to the development of group activities including andragogy (Knowles et al. 1998) and transformational learning (Mezirow 1997). Knowles was the most influential to the development of adult learning theory (andragogy) which he argued was different to the teaching and learning of children (pedagogy). He proposed that adult learners needed learner-centred approaches and mutual trust and respect (Knowles 1975). These principles of andragogy can be used to guide community-learning activities. Transformational learning theorists argue that adults' assumptions and expectations are changed through processes of critical reflection and dialogue about preconceptions. Mezirow (1978) suggested that learners benefit by engaging activities that can lead to a shift in perspectives. Community-based learning activities assist the learner as they offer opportunities to challenge, be challenged and to integrate new perspectives.

However, when planning activities, it is important to consider the diversity of participants in the learning community. Not only will students likely be at a different place in their doctoral trajectory, but they will also potentially come from a variety of social, economic, cultural, and disciplinary backgrounds. All of these factors are important to consider and may well have an influence on any student's confidence to participate. Recent findings from a UK-based study on the Cambridge

supervision system suggested that students from working class backgrounds and female students experienced some challenges in participating due to feeling inadequate and a sense that they did not belong in the environment (Gaston and Duschinsky 2020). This resonates with ideas around so-called imposter syndrome where students can fear being exposed as a fraud (Wilson and Cutri 2019). In addition, these researchers found that there were issues around who spoke and who was heard that were affected by gender and other social factors such as perceived inadequacy of language and (perceived) inability to express ideas to the standard students felt appropriate (Gaston and Duschinsky 2020). Supervisors have a crucial role in recognising and mitigating these types of issues and to creating situations where all students' value within the community is emphasised, hence helping to reinforce each and every student's sense of belonging and ability to engage.

A community of scholars is akin to a team supervision process where members of the group participate in the teaching of others. We have found this to be an effective process of team supervision where the new students learn from those who have progressed and who are prepared to support their learning. In this case, the supervisor becomes the conductor who ensures that dialogue and debate occur in relevant areas, that all members feel comfortable to speak and all have the opportunity to speak, and that any misconceptions that may occur are rectified or addressed.

**Reflective Activity 2.1**

Christine has met with Rhama and Blake. She has established that neither have had any previous experience with supervision other than their own experience as students. Neither Rhama nor Blake reported positive supervision experiences. Other than completing her PhD, Rhama has had little research experience and only the four publications from her PhD. Rhama is also beginning a career as a lecturer which will involve a very steep learning curve. Blake has not yet commenced a PhD. He completed a dissertation as part of his coursework degree and has had no other research experience.

- What steps could Christine take to help Rhama and Blake develop their skills in supervision?
- How could Christine help facilitate Rhama and Blake to be able to meaningfully contribute to student supervision teams?
- What information could Christine provide to Rhama and Blake to help them to best understand their new roles?

As students are exposed to the development needed to disseminate findings of their work, they can draw on the community members as practice audiences, to provide feedback, and to prepare them for taking questions from an audience and other skills essential for doctoral candidates. Within a community framework, there is also space for various nurturing relationships to develop between members over

and above supervision relationships, and these can include classic mentoring, peer mentoring, coaching, role modelling, and group mentoring. While encouraging these relationships, supervisors can also model establishing safe and effective boundaries. These communities are also a good way to improve writing skills and support, through peer feedback and other supportive activities.

Academic writing, while essential to doctoral study, is not taught explicitly. We find many students are anxious about writing, especially novice doctoral students. Moreover, the genre of writing as a doctoral scholar is different to other styles of academic writing experienced by students. Being part of a writing community encourages students to share and support each other while being guided by an experienced writer. These writing communities, in addition to improving writing skills, provide opportunities to celebrate success and improve motivation (Wilson and Cutri 2019).

**Reflective Activity 2.2**

On meeting with her new colleagues, Rhama found that one of the students she would be working with was an international student just completing her first year and the other is a local student who is into the third year of his PhD. Both students are enrolled full time.

- What strategies could Rhama use to enter these existing teams?
- How could Rhama begin to develop a pedagogy of supervision?

**Conversation Box 2.3 Strategies That Can Be Embedded Into Supervision Pedagogy to Reduce Potential for Student Isolation**

**Debra:** I like to have structures in place that can help students form a sense of connectedness with the supervision team, other students and the wider university community. Foster a sense of being part of something. Regular writing events such as writing groups, retreats, and discussion groups can be really helpful here and help students feel more confident and supported in their candidature.

**Patricia:** It is important to facilitate interaction, for example partnering students on specific tasks. Importantly drawing out the strengths of individuals can be very empowering. For example, many students feel English as a second language to be a limitation, drawing out where this is a strength can be useful. Sharing successes and failures on the doctoral journey can be very beneficial in strengthening relationships.

**Kim:** I also use these strategies. I find they help students to feel more at ease and supported. I also seek out opportunities to link students with others at a similar stage and watch out for opportunities for the more advanced students to assist newer ones manage some of the difficult activities that occur early in the candidature such as the application of the literature review process.

**Student Dialogue Box 2.1 Student Views on Activities to Reduce Potential for Student Isolation**

2

**Student 1:** I attend a weekly group meeting with my supervisor and her other students. It is a really good way to get to know what other students are doing and the challenges they face. We also share resources.

**Student 2:** We don't have anything like that but it sounds great. I meet with my supervisor regularly and we have a monthly student meeting where we all meet and discuss how our work is going.

**Student 3:** My supervisor organises writing 3–4 retreats every year and they are really great ways to improve writing skills and progress papers or chapters. It's also good to get the intensive time with the other supervisors and students in our research community. Plus we get a chance to participate in peer feedback groups.

**Student 4:** Five of us students who all are working on projects in women's health have a fortnightly journal club meeting. It's good for learning but also for getting to know each other and helps me to feel I have a network of fellow students.

**Student 5:** We have a fortnightly "shut up and write group" that runs every second Friday. Our supervisors take turns in running it and we always have a great lunch together on that day too. Lots of fun and laughter at lunch after the silent work in the morning. We love it.

## 2.6 Personal Supervision Style

If we accept and agree that supervision is pedagogy, then the quality of the supervisory relationship is crucial, and so working to establish safe, respectful, and authentic relationships in which all parties are able to speak and be heard is crucial. We also need to recognise the need for and importance of conceptual underpinnings and that there needs to be elements of critique and evaluation. In his work on clinical supervision, Goodyear (2014) discusses four key learning mechanisms – modelling, feedback, direct instruction, and self-directed learning – and argues that these are mediated by and through the supervisory relationship and that the quality of this relationship is a key variable to the learning that occurs. This resonates with what occurs in the doctoral supervision relationship and raises the issue of personal supervision style and models of supervision style.

Many students really struggle at the commencement of the doctoral journey. This is another scenario where having a group approach to supervision can assist. From our experiences as supervisors and mentors for new supervisors, we have found that new supervisors often struggle with identifying student needs and an appropriate pedagogical style. They ask questions like: *How often should I meet the students? What should I expect from students? And what type of goals should I set for students?* Some supervisors take a more distant approach to their supervision practice, where they are quite detached from the student and the work and essentially

leave the student to do their work on their own. On the other hand, other supervisors are more engaged, and we believe the latter facilitates more rapid and smoother completions. Reports of student perspectives and views suggest that students appreciate regular and structured supervision meetings (Brown and Atkins 1990; Friedrich-Nel and Mackinnon 2013) and tangible measures of success such as publications and other outputs. In some programs where there is prescribed course work, there is often a need to balance and calibrate interactions.

**Conversation Box 2.4 the Importance of Relationships**

**Debra:** Establishing trusting safe relationships in which responsibilities and expectations are clear and people are able to be honest is crucial to my own supervision style. It is all about the relationship, and making everyone feel safe and valued within that relationship.

**Kim:** For me, the supervisor-student relationship is pivotal to the student's success and needs to be one where all members of the team feel comfortable to raise issues and concerns, and where debate and dialogue is valued.

**Patricia:** Developing a respectful and trusting relationship is key. This includes setting mutual roles and expectations. The fine line is although this is a very personal relationship it is also a professional one. Therefore, it is important to consider that the key goal is completing the degree in a timely manner and situating the individual for future success.

Students have reported the importance of constant communication and feedback, guidance, research skill training, and a trusting environment where they feel safe to raise questions and challenge the supervisor (Friedrich-Nel and Mackinnon 2013). For some supervisors, student pedagogical needs can be frustrating as supervisors may expect students to be more independent as their candidature progresses. We have found that facilitating student membership of a research community with others of different experience levels and different stages of candidature can be enormously helpful in fostering independence in students. In our experience, students who participate actively in student life (including activities within the research community and wider university) progress towards independence much more rapidly than those who remain isolated from these important developmental activities. Fostering peer-led activities can be an important and useful strategy. This may require some departmental or institutional support.

### Reflective Activity 2.3

Blake has met with his new student and the supervisory team. At the meeting, he finds that his main role at this stage will be to assist in patient recruitment for the student project, provide clinical supervision, and help ensure quality in data collection processes.

- What preparation could help Blake take on this role?
- What information will help Blake to best support the student?

### Reflective Exercises

Reflect on the content of this chapter in considering the following questions:

1. What (or who) have been your main influences in developing your own views on supervision and doctoral training?
2. What do you think are the most essential elements of pedagogy for supervision?
3. How does your preferred pedagogy facilitate issues such as diversity and inclusivity?
4. How can students become actively involved in the development of a pedagogy for supervision?

## Template 2.1 Teaching and Learning Practices for Doctoral Supervision

| | | | |
|---|---|---|---|
| ***Supervisor considerations*** | | | |
| *Intellectual qualities* | *Supportive environment* | *Engagement with diversity* | *Connectedness* |
| Critical thinking | Student focussed | Cultural knowing and knowledge | Willing to get to know and work with the student |
| Deep knowledge and understanding of the topic area and/or methodology | Co-designed and co-construction of pedagogy | Inclusivity | Relevant and broad professional networks |
| Values and respects different ways of knowing | | | Relevant community networks |
| ***Reflective questions*** | | | |
| *How do I?* | *How do I?* | *How do I?* | *How do I?* |
| Encourage PhD students to develop critical thinking? | Motivate learning? | Acknowledge, value, and demonstrate respect for diversity? | Link teaching and learning outcomes within and beyond the traditional classroom? |
| Enhance opportunities for PhD students to be exposed to different ways of learning? | Facilitate and support student interaction? | Meaningfully commit to an inclusive learning environment? | Incorporate the perspectives of multiple stakeholders? |
| Foster deeper, more critical thinking? | Acknowledge and incorporate different ways of knowing? | Value ways of knowing from different cultural perspectives? | Encourage wider community engagement across and beyond the university? |
| Demonstrate and include different ways of knowing? | | | Meaningfully involve end service users in all stages of student work? |

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## Further Reading

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# Forming and Developing Supervision Panels and Teams

Contents




D. Jackson et al., *Successful Doctoral Training in Nursing and Health Sciences*, https://doi.org/10.1007/978-3-030-87946-4_3

### Student Reflections

*"After having time off for six months, on my return to candidature my supervisors had changed posts and therefore I had new supervisors on the team. My new supervisors had to grasp the content of my writing and guide me on the next stage of analysing findings. This was difficult as my new supervisors had to familiarise themselves with over three years of work. Having a plan for return would have been beneficial to ensure that I did not miss out as I felt that I lost approximately six months of writing time as I was not guided by the regular meetings I previously had".*

***

*"The most challenging thing that occurred as a doctoral student was managing some members of my initial supervision panel. It was very clear that some supervisors were much more engaged in the project than others. Those who were less engaged provided little or confusing feedback. In hindsight, having the confidence and skills to have open discussions about ways of working and expectations would have helped. Additionally, having supervisors open discussions about these issues might have supported me to raise the concerns".*

***

*"Working on multiple things at the same time, often in various states of incompleteness, was particularly challenging so I sometimes needed to dedicate time to simply 'think about' and 'think through' things. Often this 'thinking' meant that I was not necessarily developing anything tangible, and I often beat myself up about not being 'productive' during these periods".*

### Upon Reading this Chapter and with Further Reflection, Readers Will Be Able to

- Describe the factors to be considered when forming supervision panels and teams
- List the essential skills required within successful supervision panels and teams
- Articulate approaches to the division of responsibilities and role clarity within supervision panels and teams
- Discuss the expectations and responsibilities of the student and team members
- Explain intellectual property and authorship issues within the context of doctoral training

## 3.1 Supervision and Doctoral Training

There are various models of supervision available to support doctoral students, many of these involve panel and team approaches. These models usually feature a lead supervisor (sometimes called *Director of Studies*) and one or more additional supervisors to round out the team or panel; it is not unusual in recent times for a student to have a team of three or four supervisors. The current trend to have a panel of team members for supervision rather than just one supervisor is driven by concerns for accountability within academia as team supervision is thought to

reduce the risk of incompetence and increase the likelihood of success (Rugg and Petre 2004). Furthermore and increasingly, there is discussion of team science, which refers to collaborative activities to address a scientific challenge leveraging the strengths and expertise of domain knowledge and methodological expertise. This is important as many of the vital research questions we face in health care are complex problems. Consequently, many supervision teams are drawing on expertise of a range of disciplines. However, collaboration and respect for differences is crucial to effective team science involving persons from varied disciplinary backgrounds. For students, bringing in expertise beyond the primary discipline can both challenge and enrich their supervision experience.

The choice of supervisor is a very important decision for students – expert supervision is a key variable in successful and timely completion of doctoral work. We believe this to be the single most important decision for students in relation to their candidature. In an Australian longitudinal study conducted some years ago, involving 21 doctoral students and their supervisors, the selection of supervisors and the manner of selection (whether allocated or selected with student involvement and with attention to matching interest and relevant expertise) were found to be associated with positive student progression and satisfaction (Ives and Rowley 2005).

Many universities require a named supervisor during the application process, and this means that prospective students need to make contact with potential supervisors prior to submitting applications. This is a great opportunity to explore issues around who is available for supervision as well as their experience, availability, and supervision style. At this stage, a prospective supervisor will want information about the proposed topic and methodology and may have questions about access to participants and resources. Usually one named supervisor is enough to gain admission with the lead supervisor and student together forming the entire team after admission and once clarity is reached about the actual skills and expertise required. In some universities however, the student is not always involved in the decision about their principal supervisor or their supervisory team. Even if this is the case, prospective students should not be passive. They are still able to ask questions about the experience and expertise of the proposed team. The issues of supervision are so important that many students select a university solely based on the availability of expert supervision.

There can be great variation in quality processes around supervision between institutions. Some universities have very stringent practices around level of supervision, with senior supervision rights being awarded only after rigorous and extended training processes, demonstration of experience, and research currency. Other universities have fewer processes in place meaning that potential supervisors may have minimal or little experience. It is very important that potential students make careful choices when deciding on an institution and a supervisor. We recommend spending some time establishing the nature of processes around quality supervision within prospective institutions when selecting an institution for doctoral training.

## 3.2 Finding a Supervisor



For potential students, it is important to consider carefully who may be the best supervisor available for themselves and their project. When considering a potential supervisor, we encourage students to do their homework and seek out information about prospective supervisors and their experience of supervising at the doctoral level. The most important early decision is who will be the lead or principal supervisor. It is relatively simple to locate information about potential supervisors through searching university websites, talking to other students, and talking to staff at the university where admission is sought. It is important to consider the potential supervisor's publication track record including the type of research they undertake, methodological and content expertise, previous experience as a supervisor (have they completed students previously), and evidence of publication with their students. Information can be found in a range of places beyond the university website including through platforms and sites such a Google Scholar©, ORCID©, ResearchGate©, and other sites that track researchers and measurable researcher outputs such as publications.

Once a preliminary decision about supervision is made, it is good practice to then book an appointment to discuss the proposed project with the prospective supervisor. At that meeting, discussion can also cover issues such as resources and additional expertise needed for the project, and this is important as it helps to identify the skills needed in other members of the supervisory team. Prior to the meeting, it is ideal for the student to develop a topic overview and short proposal, prepare a short curriculum vitae that outlines previous experience and skills, gather some evidence of written work (such as previous publications or dissertations), and read information about the proposed supervisor as well as research training and requirements within the proposed institution.

Supervisors who meet with a potential student should consider several key factors, such as the student's interests and whether these align with the prospective supervisor's program of research and whether they have the time in their workload to commit to an additional student, remembering that this is a commitment that will span a number of years. We also recommend ensuring that the potential student understands the time commitment required.

There are different approaches to choosing panel and team members; however, we feel that student needs (rather than staff needs) should be the major factor driving decision-making. The panel or team that is eventually chosen for each student needs to meet the needs for teaching and learning support of that particular student and their project and needs to be able to continue to function effectively throughout all stages of the candidature, from beginning of the candidature through to the successful examination of the thesis, and potentially beyond. It is important that the team can provide the methodological and other essential skills needed to bring the project to fruition. A team approach to supervision often leads to richer discussion and more rounded feedback, which can be of great benefit to students.

Supervisors considering accepting a student should reflect on whether the institution can meet the learning needs and provide the resources that will be essential to successful completion of the project and production of the thesis. Often students need to make decisions based upon available scholarships. In making these decisions, it is important to carefully consider the resource and skills that will be required at each stage of the proposed work, and these are crucial issues when considering the composition of the team. In our experience, effective supervision teams should include at least one supervisor with content expertise and at least one with methodological expertise. This can sometimes mean looking outside of your own school or institution to ensure that the student has the best possible team. It is also useful to consider teams with a range of previous experience in supervision. We recommend at least one experienced supervisor, who has had a track record of successful doctoral completions, should be on every team. We also try to include a novice supervisor on each team wherever possible. There is a body of literature that raises issues in relation to gender in doctoral training (Smeby 2000), and because of these factors, we do try to achieve some sort of gender balance on supervision teams. Sometimes there is a need for specialist input such as clinical or industry supervisors and cultural mentors. We will talk more about the importance and roles of cultural mentors in ► Chap. 7.

**Thought Box 3.1 Reflections on Meetings**

### For Students

***Be prepared.*** Send an agenda to the team outlining what you want to cover in the meetings. In addition to the agenda, it can be useful to have a note of prompts, issues, and questions you would like to discuss at the meeting.

***Be timely.*** If you want feedback on written work such as a paper, chapter, or abstract, send the document to the team allowing them adequate time to read ahead of the meetings. Think in terms of working days. Do not assume your supervisors will read work at night or over the weekends or holidays.

***Use the time with your team effectively.*** Remember that there are others in the university who can help with some issues, particularly administrative issues. Your supervision team are there to provide you with the intellectual, scientific, content, and methodological guidance that is essential to the completion of your work, all able to be discussed in the context of your own project.

### For Supervisors

***Communicate well.*** Be clear about expectations. Be as specific as possible when providing direction. If you prefer students to make meeting notes, for example, be sure to communicate that and provide information such as how much detail is required and how the notes should be circulated and stored.

***Be present in the moment with the student and team.*** Switch off the phone, turn away from the email, and really use this time to engage with your student and their work.

## 3.3 Achieving Role Clarity on the Team



When forming the supervision panel or team, it is very important to ensure that everyone on the team is aware of the expectations and obligations associated with their roles on the team. In many universities, there are clear roles associated with each place on the team and in particular of the lead or principal supervisor,[1] who in most institutions is considered to be the person responsible for all aspects of the candidature. Other members of the team support the lead supervisor through contributing their own specialist knowledge and skill. There are various ways of articulating and allocating the roles of each team member, and these tend to be worked through on a team-by-team basis depending on team members. Sometimes a template can help to frame discussions around supervision roles (see ▶ Template 3.1 – Clarity in supervisory roles). However, it is generally expected that all team members provide regular intellectual input and constructive, enabling feedback. We will talk more about feedback in ▶ Chap. 5.

Students and supervisors may come to the candidature with differing views and understandings of their roles. For example, students may have a view that supervisors will drive the work, whereas supervisors expect this to be the role of students. For this reason, it is very important to ensure shared understandings of roles from very early on in the candidature. A good way to do this is by discussing all aspects during a team meeting. We have found that the first supervision meeting is an ideal opportunity to discuss expectations, roles, and other crucial issues such as nature and frequency and means of contact as well as nature, frequency, and structure of meetings. These early discussions enable all parties to be clear on acceptable and expected forms of contact and communication. Other opportunities to learn about roles and responsibilities associated with doctoral training are often provided in forums such as student orientation sessions, supervisor workshops, and other events hosted by universities. Many doctoral students also seek information from online forums such as those found on Twitter© and other similar platforms, where doctoral candidates from across the world are able to link up and discuss various issues including preferred supervision practices and roles, writing strategies, and methodological issues.

Given that most supervision occurs in teams, it is essential to discuss the roles of each supervisor to ensure all team members are aware of the part they will play in completion of the work. It is also important for the roles of all team members to be discussed early in the supervisory relationship. As previously mentioned, supervisors may bring various skills and a range of experience to the table, and it is important that these skills and experiences are leveraged to enhance the experience for students. Communication is central to effective teamwork, and so it is important to include all members of the team in all communications to avoid any confusion between members of the team and to ensure that way everyone hears the perspectives of other team members. We will talk more about communication in the context of doctoral supervision in ▶ Chap. 4.

1 This role has a number of different titles including *Director of Studies*, but, however named, normally refers to the person deemed to have the major responsibility for the conduct of the candidature from enrolment to graduation.

**Conversation Box 3.1 Supervision Teams and Panels**

**Debra:** I like to have two or three supervisors on each team, and usually look to ensure that one supervisor is a methods expert, and one a content expert. A third supervisor may have an interest in content or method or both and is often a novice supervisor. But sometimes the third supervisor holds speciality expertise and may be a cultural mentor, clinical supervisor or an international expert. I have found that when it works, that particular three-way skill mix is often successful for students and ensures that supervisors are well supported, and also helps to contribute to future supervision capacity.

**Kim:** Having a team approach to supervision is a good model. It not only means that students have a number of people and access to multiple perspectives on their work, but it also provides additional support for the student and an assurance for ongoing support if one supervisor leaves the institution or takes a period of leave. It is also a good way to mentor new supervisors as they can learn from the more experienced team members without the stress of being the principal supervisor. It is important however to have open and clear communication between the team at all times otherwise there is the possibility of tension arising between team members.

**Patricia:** I really like the model of team supervision as it prepares the student for post-doctoral life and the reality of working with teams. This means understanding different working styles, expectations and skills. It is also an excellent way of mentoring more junior faculty in research and the art and science of supervision. However, always it is important to develop group norms and shared expectations. It is rewarding to see how these relationships develop over time and often span over several decades.

Students are also important team members. They need to become aware of the university environment and requirements of them as a doctoral candidate rather than rely on the supervisor(s) to tell them everything. It is important that students attend events such as orientation and also familiarise themselves with the relevant doctoral student administration and institutional research processes (often accessed on the university web page enrolment, progression, and appeal processes, e.g.), the people who hold roles of importance to research students (deans, coordinators, student representatives, relevant committees), course rules, and relevant professional development programs. It is also the responsibility of the student to be aware of the services available, seminars and short courses they can attend, the resources available to doctoral students, and the criteria for the allocation of those resources. Undertaking a candid skills assessment is important. Many students fail to attend scheduled workshops only to find themselves with a skills deficit at critical times in the thesis, such as data analysis.

**Conversation Box 3.2 Difficulties on Supervision Teams**

**Kim:** I have experienced conflict in team where a student would go between the team members asking for help without communicating with the entire team. This eventually resulted in confusion and conflict as members of the team were left out of decisions that were being made about the project. I have also experienced a situation where we added a team member towards the end of the candidature at the request of the student but that person rarely attended meetings and only contributed in a very minor way. That situation was difficult to resolve but eventually we were able to make it obvious to both the student and the new team member that they were expected to play a greater role in the team supervision effort.

**Patricia:** Yes this can happen when an individual does not share the same vision as the team or for some reason the student does not feel comfortable working with them. Never an easy situation but it is important to remember the goal of this endeavour is student success – so this should be the guiding principle. It is also important that issues such as intellectual property are outlined particularly when there is disruption in the research team. Documenting decisions and ensuring clarity is important.

**Debra:** I can remember one situation where the third supervisor, after 1 year of the candidature had not yet attended a single meeting and had not actually met the student. This person worked within the university as an academic, was claiming workload hours to supervise and had been given the opportunity to provide feedback on 3–4 occasions and only provided extremely superficial feedback about factors such as typographical errors and had not engaged with the substance of the work. The university had multiple campuses and so that may have played a part. But I still felt that by the end of the first year, the student should have met and formed an appropriate relationship with each of their supervisors. After discussions, that colleague withdrew from the team and we appointed a novice supervisor to whom we very clearly explained the expectation. That was ultimately a very good decision. The newly appointed member of the supervision team did a brilliant job with that student and was a great asset to the student and the team.

## 3.4 What Are the Essential Skills Required Within Successful Supervision Panels and Teams?

Supervisors have various styles and students also have different ways of learning. However, what is important are the qualities and skills that supervisors bring to the team. In addition to content and methodological expertise, it is important that supervisors have the time to commit to the student, bearing in mind that this commitment will continue for a number of years. Like any relationship, mutual respect is key to maintaining this relationship over time, and we consider respect to be an essential underpinning element of successful professional relationships.

**Table 3.1** Supervision

| | |
|---|---|
| *S*killed | Has the skill and expertise to guide the student through all aspects of candidature |
| *U*nderstanding | Able to understand the perspective of the student and the impact of their life experiences and commitments on their work |
| *P*rompt | Adheres to timelines and responds to students promptly. |
| *E*motional awareness and insight | Has the insight and ability to control own emotions, express emotions appropriately, and be sensitive and respectful to the emotional needs of others |
| *R*eliable | Does what they say they are going to do |
| *V*isionary | Can hold a vision for the students work and look ahead with wisdom and imagination |
| *I*ntegrity | Works with integrity and honesty in all aspects of research and teaching |
| *S*upportive | Able to support the student for the duration of their candidature and even through their first post-doctoral years |
| *I*nstructor | Understands that teaching is integral to the supervision role and is prepared to teach as necessary throughout the candidature |
| *O*versight | Provide oversight of all aspects of candidature |
| *N*egotiator | Able to advocate and negotiate on behalf of the student as needed |

Supervisors also need to be able to identify when a student would benefit from pastoral care and know when and how to refer students to others in the graduate student support team such as counsellors and others. We have also found that there are other key essential personal skills and qualities that are fundamental to effective doctoral training and have developed an acronym that captures these (see Table 3.1).

## 3.5 Expectations and Responsibilities of the Student

Successful doctoral studies require a major commitment on the part of the student, and there are a range of expectations and responsibilities associated with enrolment in a doctoral degree. It is very important to ensure that the student has adequate time to devote to the candidature. Doctoral studies represent the highest pinnacle in academic achievement, and we have found that many students coming to doctoral work do not fully appreciate the time required at this level of study. Most universities have a clear statement about the expectations of time that the student will devote to their studies, and this is often around 35 h every week across the duration of candidature for a full-time student and around 20 h for a part-time

student. Of course, this can vary, and at some periods of candidature, more time may be required to meet the demands of the degree. It is also important to put time to best use, and we have found many students need help to do this, particularly in the initial period of candidature. We have developed some templates that can be very helpful with this (see ▶ Template 3.2 – Student daily diary).

We have found the student daily diary template very useful in helping students develop enhanced understanding of how they use time, which is one of the important things to learn when undertaking doctoral studies. We use this template particularly for those students who are struggling to meet goals. This template encourages students to set themselves short-term weekly goals, facilitates structured reflection on how they spend their time in their week, and then prompts reflection on whether or not they were able to meet their goals and, if not, why not. We ask the students to submit this to us at the end of each week, followed by a short 20 min discussion to reflect on their week and to consider ways they may be able to use this information to their benefit. In our experience, only 4–5 weeks of using this diary can be very helpful for students to be able to better articulate achievable goals and have enhanced insights into how long it can take to satisfactorily complete them, as well as other useful insights about their own use of time, such as the most productive time of the day for them to work. This willingness to commit to having better understandings of how they learn augers well for students' successfully completing their work.

It is also important that students commit to maintaining contact with their supervision team, as supervisors should not have to chase students for contact. Similarly, students should ensure all members of the supervision team are copied into communications so that all can comment on and support their work. Being open to and responsive to feedback is also crucial, and we will talk more about feedback in ▶ Chap. 5. In addition, it is important to become familiar with the communication strategies within the institution of enrolment. Most universities have a Graduate Research School or similar department that handle a lot of matters affecting doctoral students. This is often a crucial point of contact for students and supervisors alike.

Universities have many processes in place that will directly affect doctoral students, and these include obligations around ethics processes, regular progress reports, requirements around presentation of work in progress, data management and storage, financial probity, and various other reporting and monitoring processes. Students need to be familiar with all of these requirements and processes and ensure they manage their projects and candidature in line with university requirements. Supervisors will be able to provide advice around these matters, and so it is important to raise these types of issues at supervision meetings or through appropriate administrative channels within the university. Even though many students may be quite time poor, as we have previously indicated, we have found it to be useful and beneficial for students to make the time to participate in appropriate events that are hosted for them by their school and university, such as workshops and seminars, as these are often important sources of information for students.

## 3.6 Team Meetings

Meetings between the student and the supervision team are a vital and essential part of doctoral training. Team meetings are not to be confused with informal chats or other forms of interaction that may occur between student and supervisor. Team meetings have an absolute focus on the student and the project and are a very important part of the contract or agreement between students and supervisors. It is important that all parties understand the centrality of supervision team meetings to the candidature and its ultimate success and that this important time together is used optimally.

From commencement of the candidature, it is useful to discuss frequency and nature of meetings. It is important that all team members are invited to and included in all meetings. We have found the most efficient way of organising student meetings is to agree on them as early as possible in each year (or towards the end of the year for the following year) and then book them in advance for the whole year. While we do try to ensure full team meetings as regularly as possible, it is not necessary that all team members attend every meeting. Sometimes, this will not be possible, especially where there are 3–4 supervisors on the team and, particularly, where there are time zone differences within the team.

An important decision to be made is how the meeting notes will be recorded. Sometimes students will ask to audiotape meetings, and there are mixed views on this. But no taping that could impinge on the rights of anyone should be permitted. That means that all people in the room should give consent to being recorded and no surreptitious recording is acceptable. We have found that permitting audiotaping in group supervision sessions can affect the participation of students and their willingness to join in on the discussion, and this is a factor to consider before consenting to audiotaping group supervision meetings.

We encourage students to take responsibility for meeting notes through use of a template (see ▶ Template 3.3 – Team meeting template) and then ask that the student circulate these notes to all team members. In this way, all team members are able to keep up to date with issues for the student and the project even if they have not been able to attend a meeting. It is also ideal for students to take the lead on the direction of supervisor-student meetings. For this reason, we encourage our students to set and circulate an agenda to the entire team prior to each meeting (see ▶ Template 3.3 – Team meeting agenda).

We prefer to work within communities of practice models, and so meetings for the student can comprise a mix of team or group supervision meetings (within the community of practice framework) and individual meetings. We aim that our students have the benefit of a meeting each fortnight, and this may take the form of a team or group supervision meeting once a month and an individual meeting once a month, meaning that the student is given an opportunity to join in with their peers and supervisors regularly. This also helps them to build rapport and comfort with their fellow students and develop a sense of ease in talking about their work with others. Meetings can be face-to-face or mediated through an interactive real-time platform such as Zoom© or Teams© or similar. The need for and nature of

meetings may change over the course of candidature, but regardless of stage of candidature, we believe that it is important to maintain that regular direct contact for the duration of candidature.



## 3.7 Encouraging Students to Be Active Participants in Meetings

Students may sometimes find it difficult to speak up in meetings. In some ways, this is understandable because when you think about it, it could be quite intimidating to be in a meeting with two or three academics, especially if you are feeling uncertain and your work is being scrutinised. So, it is important to take steps to help the student find their voice and feel confident and able to speak up at meetings. There are a number of ways of doing this including:

- Asking the student to spend the first 5 min of each meeting presenting where they are up to with their work, highlighting achievements, challenges, and any impediments.
- Using a questioning approach to frame the meeting and focus the discussion. This can be very helpful in encouraging student-focussed dialogue and discourse and also helps prepare students for taking questions from others beyond the supervision team.
- Avoid jumping in to answer questions for the student. Allow time for the student to gather their thoughts and respond to a question.
- If the student is not joining in on the discussion, ask the student a question about what they are thinking about the discussion or the issues, to re-centre the student to the centre of the discussion.
- Posing questions, such as "what are you planning to achieve before the next meeting", "what is your plan for addressing this objective or issue", and "what are the major issues and challenges you are anticipating in taking the next steps", are also useful for re-centring the student in the discussion.

It is important to remember two main factors when reflecting on student engagement in meetings:

1. Every student is different, and because of this difference, factors individual to each student and team will influence the level of participation. As the team works together and team members get to know one another, additional factors may emerge, but issues to initially consider are factors around culture, gender, and age. Any and all of these variables can likely influence interaction within the team.
2. The sorts of discussions that can occur in supervision meetings are often complex. Talk can turn to conceptual matters that are very nuanced and complicated and about which the student may only be beginning to develop familiarity and engage. While such discussions are an essential and expected aspect of doctoral studies, this factor can be a form of barrier and impede student confidence and willingness to talk and engage. We have found it can be useful to use strategies such as drawing diagrams and figures (to show relationships for example)

while discussing concepts as many students find that to be a little easier to engage with and also can give them something to take away from the meeting.

**Reflective Exercise 3.1**

As novice supervisors, Rhama and Blake decide to get together to provide peer support to one another as they take on their new supervision roles. They meet for coffee and update one another on their supervision activities. Rhama tells Blake she is excited to have the opportunity to co-author papers with the student and colleagues on the supervision team. Blake asked Rhama how authorship and order of authorship is decided.

- What is the significance of author order for Rhama?
- What factors will influence author order?
- What resources and information would help Rhama and Blake understand the implications of authorship and order of authorship?

## 3.8 Understanding Intellectual Property

An essential element of doctoral training is the production of knowledge. Research conducted as part of doctoral training is often at the cutting edge of the field, and we would say that all doctoral projects generate some form of original knowledge or unique insight that is suitable for submission for publication in scientific and scholarly journals. This means that supervision and doctoral training involves more than pedagogy. Issues around intellectual property and attribution are also raised. It is important not to make assumptions here. Checking guidelines about these issues within your institutions is important. Introducing issues around attribution and authorship on thesis outcomes early on in the candidature is critical. More and more students are taking doctoral degrees that involve submission of theses in the form of published work, and many universities have a requirement that students write a minimum percentage of each paper associated with their doctoral work and all authors must attest to this (see ► Template 3.4 – Attribution of authorship).

Doctoral supervision includes modelling ethical behaviour in research and helping students understand what constitutes authorship. In fact, understanding ethical attribution of intellectual input and understanding the meaning of authorship are essential aspects of doctoral supervision. It is also important that students are helped to understand matters around author misconduct so that they can avoid such behaviour as this can have far-reaching professional ramifications. In our supervision practice, we have found that introducing students to the concepts informing authorship as early as possible in their candidature is very useful. We draw on authoritative guides and resources about authorship such as those provided by the Committee of Publication Ethics (COPE) and International Committee of Medical Journal Editors (ICMJE). Both of these bodies provide clear and fair guidance on criteria for authorship that is widely recognised interna-

tionally. It may be that some people on the team or associated with the project do not fit the criteria for authorship, and these people may be acknowledged with their contribution specified, rather than named as an author. If there are conflicts or questions about authorship, guidance is available from COPE who provide information about how to handle authorship disputes.



Once it is established who meets the criteria for authorship, author order is also an issue for consideration and discussion. In any publication where there is more than one author, decisions about order of authorship need to be made. These matters should always be discussed and agreed, rather than simply assumed. This can be a difficult matter to make decisions about (Cleary et al. 2012) and it may be that students are naive about this and so it is important that authorship and author order are raised, discussed, and agreed with every publication as well as other disseminations (see ► Template 3.4 – Attribution of authorship). This is an issue of importance as increasing weighting being given to authors on the basis of author order (Bu et al. 2020), and it is generally considered that first, last, and second positions are seen as being of more importance than other authorship positions (Baerlocher et al. 2007; Cleary et al. 2012). Occupying particular places in authorship can also be associated with particular roles in the preparation and submission of papers, and these are also issues to be discussed openly within the team. In the vast majority of situations, the students would go first on the papers from their doctoral work with other authors included in accordance with author guidelines. Most journals also have the provision to have multiple first authors (or authors in any position), and this is another matter that students need to be aware of.

**Conversation Box 3.3 Gender in Supervision Teams**

**Patricia:** I have been asked to sit on a committee to oversee the review of targets for women in our university. While we have increased our percentage of women to men markedly, I am concerned that most of the senior levels are still held by men and there is little cultural diversity. This often carries through to supervision panels.

**Kim:** I see this as a big problem. For effective supervision to occur, one of our recommendations is for gender representation across teams. That is hard to achieve when not all women have higher degrees, and those who do are often burdened with very high undergraduate teaching loads due to their junior position meaning they have limited time to commit to PhD supervision.

**Debra:** It is important to not make assumptions about gender and more and more there is awareness around disclosing and checking pronouns with students and others on the team. We also aim to have gender diversity on each student team, but even if we cannot do that for whatever reason, we ensure that the wider community of practice that supports our students features gender diversity.

### Reflective Questions

1. What are the main factors to consider when forming a team around a doctoral student?
2. What skills do you bring to a supervision team?
3. What skills do you think you need to develop to be a more effective doctoral supervisor?

## Template 3.1 Clarity in supervisory roles

| Role | Responsibilities | Signed |
|---|---|---|
| Candidate | Demonstrate commitment and initiative and take the lead in most aspects of project work<br>Maintain regular, frequent contact with supervision team, and engage with supervision advice in good spirit<br>Understand and adhere to the regulations and processes associated with their candidature, including advice and critique | |
| Name | Participate in appropriate university events including orientation and compulsory training activities<br>Commit at least 35 h a week to the project (FT candidature) and 20 h per week (PT candidature)<br>Avoid placing unreasonable demands on supervisors by conducting work efficiently and meeting deadlines in a timely way<br>Set and meet deadlines to ensure project and agreed tasks are completed in a timely manner<br>Work with integrity and meet accepted research standards in accordance with ethics guidelines, author integrity guidelines, and other relevant guidelines<br>Commitment to the writing task in a timely manner<br>Participate in all monitoring and reporting mechanisms in accordance with university requirements<br>Participate in and contribute to the life of the department<br>Report or raise concerns about any matter in a timely manner | |
| Principal supervisor | Lead the supervisory team and hold overall responsibility for the candidature<br>Monitor the performance and progress of the candidate, and ensure adherence to mandatory processes such as mandatory progress reports, ethics processes, data management and storage, financial record monitoring, nomination of examiners, and other processes | |
| Name | Discuss regulatory issues with the candidate as needed<br>Regular student meetings and providing timely student feedback<br>Lead the team, supporting all team members to be active and participatory to meet the needs of the candidate<br>Provide mentoring to all members of the team as needed<br>Ensure candidate has access to all necessary resources and that the environment is in keeping with health and safety requirements<br>Ensure compliance and adherence with university policies and that any matters are elevated as needed | |

| Role | Responsibilities | Signed |
|---|---|---|
| Co-supervisor 1<br>Name | Assists the principal supervisor<br>Covers for principal supervisor during periods of leave<br>Attends and participates in student meetings<br>Provides expert opinion on the nature, planning, and conduct of all aspects of the project | |
| Co-supervisor 2<br>Name | Contributes to progress reports<br>Supports the ethical conduct of the project<br>Supports candidate development<br>Provides critical feedback and document review as needed<br>Provides advice on methodological issues including analysis | |

## Template 3.2 Daily student diary

Name: _____

Weekly study diary for week beginning: ____/____/_____ ***List activities for each day and time into the table below***

| Time | Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

My goals for the week were to:

1.
2.
3.

Were these goals achieved? ***Please circle appropriate response below.***

Yes

No

If no, why not:

My goals for next week are to:
1.
2.
3.

## Template 3.3 Team meeting template

**Student-supervisor(s) meeting agenda**
**Date:**
**Attendees:**
**Location:**
**Note taker:**
**Circulation date:**
**Filing details:**

| | Item to be discussed | Outcomes to be addressed |
|---|---|---|
| A | Update on progress by student | |
| B | Update on supervisor(s) feedback | |
| C | Student goals for the coming 2 weeks | |
| D | Outcomes of any papers or abstracts under review | |
| E | Check on any enrolment, funding, health and safety, and technical issues | |
| F | Student planned activities | |
| G | Next meeting date | |

### ■ Template 3.4 Attribution of authorship

*Students and supervisors should read the information on authorship for new authors published by the Council of Publication Ethics and the International Committee of Journal Medical Editors before completing this form. Links below:*

► http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html

► https://publicationethics.org/resources/guidelines-new/how-handle-authorship-disputesa-guide-new-researchers

Responsible academic staff member (supervisor): _____

Title of the paper: _____

_____

_____

Title of journal: _____

_____

| Names of authors (in order as on paper) | Contribution to the paper – specify ICJME tasks and percentage | Signature |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

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## Further Reading

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# Establishing and Maintaining Effective and Resilient Student/ Supervisory Relationships

Contents




D. Jackson et al., *Successful Doctoral Training in Nursing and Health Sciences*, https://doi.org/10.1007/978-3-030-87946-4_4

### Student Reflections

*"I felt I could ask any question, I never felt judged by them so I guess this is because they put in the time to develop a relationship that was trusting with me, this is something I try to do now with students. In my study, the statistical results were not as expected, this was a huge disappointment but I was supported to know that all results are valued, although there were a lot of tears! So I would say again that putting in the time to develop a trusting relationship was what helped the most during this time as I felt I'd let them down".*

***

*"Two of my three supervisors were also my colleagues at work, and, sometimes I found to maintain and juggle the relationship as a doctoral student and colleague needed a greater level of awareness and adjustment in switching roles on my part. However, I was extremely fortunate to have a good working relationship with them and this helped during the supervision sessions".*

***

*"The significant amount of thinking time that sits behind most aspects of research and the development and writing of a thesis, is crucial, albeit often 'hidden'. It is generally what allows us to be productive. While my supervisors were supportive of me creating opportunities to think, read, question and be inspired, I don't believe I fully appreciated the value of making space to press 'pause', so that I could sit with and think through ideas, even the partially formed ones. I truly believe that doctoral students need their supervisors to discuss the value of constructing dedicated time and space to think, and support them to orchestrate meaningful time to ponder and wonder without responding to the seductive urgency to produce an outcome".*

### Upon Reading this Chapter and with Further Reflection, Readers Will Be Able to

- Describe the elements of successful supervisory relationships
- Verbalise the importance of effective communication (including having difficult conversations) in establishing and maintaining supervisory relationships
- Explain the potential for conflict in the supervisory relationship and articulate strategies to mitigate conflict, including avoidant and splitting behaviours
- List strategies to facilitate the resilience of the relationship

## 4.1 The Supervisory Relationship

As we have highlighted throughout this text, supervision is a unique form of teaching and is one that is premised on quality relationships that need to be able to endure over a number of years and withstand the highs and lows of the candidature. There is a raft of literature that attests to the importance of the quality of the supervisory relationship (Abigail and Hill 2015; Ives and Rowley 2005; Jackson et al. 2009, 2021a, b, c). This literature identifies the relationship between supervisor(s) and student as a crucial variable that will influence and shape the experience of candidature for both student and academic supervisor(s). As we have discussed in the previous chapter, student supervision frequently involves a panel

approach, and this means that there can be multiple relationships to be negotiated successfully over the course of a single student candidature.

The supervisory relationship is a purposeful relationship with a clear goal and end point. The nature of doctoral training means that students take a lot of feedback and supervisors need to be able to provide ongoing feedback and critique over the duration of enrolment. We will be focussing on feedback in the next chapter so will not go into it too deeply here, other than to say that the supervisory relationship needs to be such that it is able to provide a safe context for ongoing and continuing feedback and critique. We all know that it can sometimes be difficult to take feedback and also sometimes stressful and difficult to provide it, and so it is vitally important to establish a safe relationship for students within which feedback can be effectively given and received.



## 4.2 Establishing the Relationship

After enrolment, it is important to realise that the supervisory relationship is pivotal to success. Like any relationship, if it is to work out, all parties need to honour it by putting an initial and continuing effort into establishing and maintaining the relationship. As with any other relationship, investing time getting to know each other is integral – time that supervisors and students spend getting to know one another can help to get things off to a good start and can make an enormous difference across the whole candidature. It is very useful to get to know one another's styles of learning and teaching, for supervisors to understand student motivation for undertaking doctoral training, their expectations of the journey, and where they hope it will lead them. Taking the time to understand these things foretells well for the quality and the future of the relationship.

For students, doctoral training marks a new chapter and brings with it new ways of relating with academic staff that are often less hierarchical and prescribed than previously experienced. The emphasis on independence, initiative, and personal as well as professional development can be a new experience for students. The relationship with academic staff extends for a much longer period than when doing coursework, and critique, discussion, and engagement are much deeper. During the period of candidature, which spans many years, life continues and usually involves numerous life events for students. As supervisors, we become witness to the lives of our students in quite a sustained way, and they too get to know us over time, and this familiarity may be quite new to all parties (Jackson et al. 2021a). In addition to the duration of the relationship, the nature of the relationship is unique and involves enormous growth as well as ongoing and sustained critique and feedback. As we have previously noted, it is important that all parties are clear about the purpose of the relationship, their roles within the relationship, the boundaries of the relationship, and clarity around expectations of the relationship.

Role in this context means what the stakeholders (students, supervisors, and institutions) expect, with regard to what supervisors actually do and how they

conduct themselves. Importantly, roles may differ across time different periods of the PhD journey and as requirements of individuals emerge. For example, a supervisor may take on one role early in a student's candidature (such as a provider of content and direction) but another later on when the student is more independent (perhaps more of a critical friend). Role expectations may also differ at different time points of the candidature, where the student is facing different needs for support around research topic identification, data collection, data analysis, and completion, for example. During these periods, the supervisor adapts their role to best suit the needs of the student.

Expectations are something that should be predetermined and agreed upon by all members of the team (Mainhard et al. 2009). Having agreed-upon expectations early in the relationship is an important way to prevent problems arising in the future as failures in the supervisory process are often related to differing expectations between students and supervisors. A good way to help avoid difficulties over expectations is for both the student and supervisor to discuss expectations openly. Some teams will formalise this and even complete an expectations questionnaire and share the outcome or, alternatively, create a set of guidelines that all team members agree upon.

Mismatched expectations are a recipe for disappointment and even conflict, and in recognition of this, many universities have some form of template covering key issues that can be helpful in developing shared expectations while establishing and during the supervisory relationship. Check with your university, but if they do not have one, we can suggest the template prompts that we use (see ▶ Template 4.1 – Student and supervisor agreement).

When establishing the relationship, it is also important to be aware of and familiar with the support services available to students and supervisors that are on offer within the broader university. In our experience, it is important that students develop a sense of belonging with the institution, the faculty, and also the supervision team as quickly as possible. We do encourage our students to fully participate in student life, and while not wanting to make generalisations, we have found that students who do take advantage of the many opportunities and supports offered by universities tend to perform better in their doctoral studies than those who do not. We also talk to new students about university policies around communication and raise the issue of conflict, and how we will deal with conflict, should it arise at any time during the candidature.

In establishing and maintaining relationships, there are a number of factors that can influence how the relationships are played out, for example, gender, age, and stage of career as well as cultural factors. Achieving gender diversity on teams can be very important as there is a raft of evidence indicating that gender issues can play a role in doctoral training (Carter et al. 2013; Gaston and Duschinky 2020). In nursing and health care, it is not uncommon for doctoral students to be quite mature in their professional lives and already have considerable professional standing and experience. These students may be used to having a large amount of autonomy in their professional lives. They may not have studied formally for some time

and so be unused to being challenged or critiqued; thus, these aspects of doctoral candidature may prove to be challenging, initially at least. It is important to remember that regardless of professional seniority, these students may be very inexperienced as doctoral students (Jackson and Cleary 2011). Cultural factors can also be significant in doctoral education, and in ▶ Chap. 7, we will focus on cultural considerations in relation to doctoral supervision. Another factor that can be very influential in creating and maintaining supervisory relationships is where there are other, pre-existing relationships among the team, such as when a doctoral student is also a colleague. This is not uncommon in nursing and health care, where, often, academic staff are working to complete their own doctoral studies in the very same faculties and schools they work in as academic staff members. In these situations, it is very important to privilege the supervisory relationship and ensure that other work matters such as teaching issues and so forth do not impinge on supervisory sessions.



As with any relationship, regular contact and communication are crucial not only in establishing but also in maintaining the relationship. One of the primary ways of doing this is through regular team meetings. Supervision meetings provide opportunities for focussed interaction, providing feedback and feedforward, discussion of the progress of the work, and the team to bond and strengthen their relationships. Used effectively, meetings can help students and supervisors develop clear plans of action, understand accountability within the candidature, and recognise and address any issues that arise over the course of the candidature. The format, nature, and frequency of meetings can change from team to team and student to student. What is important, as we have previously stated, is that all are clear about the nature, purpose, structure, and frequency of meetings and a range of other issues including where meetings will take place, how they will be recorded (and by whom), and how meeting notes will be circulated and stored (see ▶ Template 3.3 – Team meeting template).

It is important that all team members are clear on agreed actions and decisions arising from meetings, and so we encourage our students to make notes and circulate to the team after the meeting so that we can all ensure shared understandings. If taken consistently, these notes can provide an important and ongoing record of candidature, able to be access by students and supervisors. It is also important to recognise that the support needs of the student may change at different points of the candidature and so it can be useful to regularly re-engage about meetings to ensure that the frequency, format, and nature of these meetings are still adequate to meet student needs.

While it is necessary that all supervisors are well engaged with students, we do not believe that every supervisor needs to be at every meeting, but ensuring communication among the team is important. We have a policy of not cancelling student meetings regardless of other pressures, and so we always ensure at least one of the supervision team can attend every meeting, with other supervisors participating in other ways, such as through the provision of emails or other forms of written engagement. We also draw on interactive real-time platforms such a Zoom©, Teams©, and other Internet-based resources to facilitate interaction and

engagement at meetings. This is very helpful particularly when teams are working across national and international borders.

**Conversation Box 4.1 Optimising Supervision Meetings**

**Debra:** I encourage students to set the agenda, and to send this to all members of the team, along with any work they would like to discuss at the meeting. Ideally, it works best if this comes to the team 48 h ahead of meetings to give us all the opportunity to read and reflect on it. I also encourage the students to keep notes of the meeting to be sent to the whole team to keep us all on the same page. I like to encourage the student to develop some goals for each meeting that we can reflect on. I prefer the meetings to be about 45–60 min in duration, and usually try to set them up for a year in advance to ensure that every student gets adequate time into the diary.

**Kim:** Regular meetings are important. I like to meet with every student for an hour every 2 weeks. This is a time when the student has my full attention and when they can update me on the work they are doing, their progress with meeting goals, and bring up any issues they have experienced since the previous meeting. It is also an important time for relationship building so I always like to spend some of each meeting discussing other things such as family and leisure time and so on. In most cases, the student should take the lead in these meetings as they know what they need discussed and are able to identify issues and/or decisions to be made. I encourage students to write a short overview of the meeting and decisions made after the meeting for circulation to the team.

**Patricia:** Using the meeting to reflect on progress, celebrating successes and acknowledging failures is important. I really like to create a culture of openness, shared ownership and mutual accountability. Just in time communications via email or phone can be very useful in addressing in critical issues. I tend to have group meetings where key goals are shared, expertise developed and community is developed interspersed with one on one meetings particularly around specific project issues.

The importance of supervision meetings to the relationship and to the doctoral training process is such that we are careful to privilege this time with students. We use strategies such as mindfulness to authentically engage with, be in the moment with, and hold space with the student and their work. This time is allocated to the student and their work so it is important to take care to not take calls during meetings, not glance at emails, or succumb to other distractions. This focus is important to convey real interest and engagement with the student and their work. As stated, we have a policy of not cancelling student meetings, and we have various ways of managing our diaries to ensure that at least one (if not all) supervisors can attend each meeting. If students cancel a meeting, we tend to not remove the meeting from our diaries; rather, we add a notation to say when and why the meeting was cancelled and by whom.

## 4.3 The Student-Supervisor Agreement

Students come to doctoral study with expectations about what the supervisor will provide and how they will guide the student's study. Supervisors also have expectations about students and how they will behave during their candidature. It is important that these expectations are shared and discussed openly as doing so can avoid conflict developing later in the candidature. Research supervision has changed in recent times to become more student centred. As a result, the power shift from supervisor to student means that students now have more say in negotiating what, how, and where they learn. To facilitate shared understandings, many universities require that PhD students and their supervisors enter into a formal agreement. In that case, the university will provide a form to be used by the team in completing the agreement. Otherwise, supervisors can develop or adapt their own template (see ► Template 4.1 – Student and supervisor agreement).



These agreements should be undertaken at the commencement (or as near to as possible) of candidature and should address issues such as frequency and timing of meetings, location of meetings, setting of the meeting agenda, roles of supervisory team, role of the student, feedback types and amount, authorship, intellectual property, health and safety, ethical issues, confirmation, meeting milestones, progress reports, and clarifying students have clear understandings of issues such as clinical governance, plagiarism, and predatory publications. Early discussion of expectations and clarity around these sorts of issues is of crucial importance to the functioning of the team, particularly over time.

## 4.4 Establishing and Respecting Boundaries

Boundaries are also shaped and maintained by what supervisors believe others expect of them and what they expect of themselves (Benmore 2016). Effective safe boundaries are essential for all within a supervisory relationship, and so it is important to consider the factors that will make everyone feel safe and valued within the relationship. This can include factors such as considering individual and shared expectations of the relationship, clarity around preferences for communication within, and, in addition to scheduled meetings, how often feedback will be provided, the nature of feedback, and the timelines around this as well as the roles of the different members of the team as discussed in the previous chapter.

Boundary incursions represent a very real threat to the team and will affect the whole team. Supervision and doctoral training are really team sports. There is a need for safe boundaries, as breaches of boundaries have the very real potential of damaging relationships within the team. In doctoral training, activities are centred around a whole team, and the efficacy and functionality of the team are crucial variables. Healthy, professional boundaries are crucial here to maintain the health of the team. This means that breaches of boundaries between any team members can influence the functionality of the team and can make the team become unsafe for some or even all team members. Working on a team where a supervisor forms a close personal social relationship with the student or where the student becomes

involved in the supervisor's personal life, for example, can make things difficult for other team members. In some instances, there have been reports of exploitation of students in undertaking the supervisor's tasks not directly related to the student project. It is important at all times to carefully consider the effect of any changes to boundaries between members of the team on the team and how that can affect student progression, team dynamics, the outcome of the project, and the overall student experience. Open and clear communication is essential.

As previously mentioned, social media provides considerable opportunities for communication and professional growth, but also represents a potential for boundary incursions. We recommend due consideration be given to what social media platforms supervisors and students could share and also consideration of what material will then be placed on these sites. It is important to remember that all parties in the supervision team are entitled to downtime and personal time, and it is important to respect this if people are going to connect on social media.

## 4.5 Review of Progress

Most universities have several formal processes to monitor the progress of each student. These are generally aimed at ensuring progression and the early identification of problems or issues so that remedial support can be provided. These are often a mix of milestone measures and progress reports that are subject to some oversight beyond the supervision team. These are important processes and particularly so to the student. It can be argued they are also (in some ways) a measure of the success (or otherwise) of the team in that they require clear and open communication and shared understandings.

Some universities admit students to doctoral programs on a probationary basis, for a set period in which certain requirements must be met. On satisfying requirements of the probationary period, students may then be admitted to full candidature. Review of progress is usually a key milestone for probationary students that will be linked to successful completion of the probationary period.

Review of progress forms a formal record of student candidature. Therefore, it is very important to be completely honest when assessing student progress. If the student has not progressed as expected, it is important that this is stated on the documentation. If there are delays to student work even if the student is working consistently well, it is important to state this and to try to put a value on the delay, with statements such as: "While the student is working consistently well and has met several key milestones, an episode of illness that has meant the project is approximately 4 weeks behind schedule". This level of detail can become crucial later in the candidature, if a request for extension of candidature is required.

Review of progress procedures does differ between institutions, but generally supervisors have the following options in relation to review of progress: *satisfactory, conceded satisfactory*, and *unsatisfactory*. Generally, either of the latter two options will result in an intervention of some sort by a third party – often the coordinator of the doctoral program or representatives of the graduate school (or equivalent). This intervention may take the form of an interview with the student

and supervisors, in which efforts are made to mitigate the factors associated with the unsatisfactory progress and ascertain any additional support that could be helpful to student and to the team.

**Thought Box 4.1 Reflections on Review of Progress Meetings**

**Students:** Ensure you have done the necessary research about what is needed on your part for this process. Many universities require that students begin the process by filling out a progress form which is then sent to the supervision team ahead of the meeting. If this is needed, be sure to insert adequate details about your progress. In doing this, it is useful to review:

- The original project timeline in relation to actual progress of the project
- Learning and development activities including workshops, seminars, classes, and conferences participated in since the last progress review
- Project-related activities such as ethics processes, completion of literature review, recruitment, and data collection begun or completed since the last progress review
- Progress of actual written work including status of chapters, manuscripts submitted for peer review or accepted for publication, manuscripts in development, and abstracts submitted to conferences

**Supervisors:** At this meeting, it is important to look for actual evidence (as opposed to simple verbal assurances) of progression. Before the meeting, ask that the student complete their part of the progress report and submit that to the team ahead of the meeting. In preparing for this meeting, it can be useful to review the documentation from the previous review of progress and review and consider the students' comments on their view of their progress and work, in addition to reviewing the project timeline in relation to actual measurable progress. Ensure that communication about expected performance and actual performance is clear and unambiguous. Allow time for the student to ask questions, and ensure shared understandings of all issues and decisions.

## 4.6 Effective Communication and Difficult Conversations

All relationships require effective communication that meets the needs of all parties, and the supervisory relationship is no exception. Establishing and maintaining clear and unambiguous communication is essential, and this is a very important issue to discuss with students right from the beginning of candidature. It is important all within the supervisor relationship are clear on acceptable ways of communicating within the team.

As we have previously noted, social media presents new challenges in negotiating communication between students and academic staff. There are all sorts of good reasons for doctoral students to be active on social media (Ferguson et al. 2015). Some supervisors adopt social media platforms such as Facebook© and Twitter© as a strategy for linking with students, while other supervisors have restrictions on interacting with students through social media. The thing to remember with drawing on these means to enhance communication is that there may be more personal disclosure than desirable and also that platforms such as Messenger and other instant messaging programs may be accessible. What is important here is that there is clear communication about expectations in relation to contact via social media.

Even with the best plans and strategies, not all relationships run smoothly, and difficulties can arise. Many of these arise because of communication problems. If things do start to deteriorate, it is important to address this early. While all team members are responsible to communicate effectively, it is the principal or lead supervisor who has the main responsibility to manage any issues that may arise during the student-supervisor relationship. It is important to remember that if you avoid difficult conversations when needed, they do not go away but rather continue to haunt the team. If the student remains unaware the behaviour is unacceptable or their progress unsatisfactory, they remain unaware that their behaviour is affecting others or that their progression is threatened. Similarly, if students are not happy with their supervision, it is important to find a way of raising this. If this does not happen, supervisors have no way of knowing that there is a need to modify their approach. While this can be hard to, we do recommend raising issues and involving a third party such as the postgraduate coordinator or a person from the graduate school if necessary. It is in everyone's best interests to address issues that arise.

**Conversation Box 4.2 Supervision and Social Media**

**Debra:** I encourage students to use social media as way of linking with other students and of staying informed about issues in their fields as well as promoting their work. Social media is a great way for students to build their networks nationally and internationally, and get to know others in their fields. It is also a good way for students to promote their work. I have had several students get to know other students and colleagues through social media that they have gone on to meet at conferences and through student visits. I also connect with students through some forms of social media, particularly Twitter©.

**Kim:** I agree that social media is an important communication method. I encourage communication through social media as well as email. I also encourage students to communicate with their fellow students through social media and found it is a great tool for students to promote their own work and share publications with others. As

I am aware that my students are privy to my social media, I am thoughtful about what I post about myself and am respectful of students' right to privacy.

**Patricia:** Ensuring boundaries in all parts of professional life are important. Recognizing that there is a "business" element of the relationship and that both parties have rights and expectations is critically important. Similarly, ensuring students have a professional persona on social media is important. Engaging in media training is a useful strategy for doctoral students.



**Conversation Box 4.2 Student-Supervisor Expectations**

**Student 1:** I think my supervisor is expecting too much from me. It is getting me down and I don't know what to do.

**Student 2:** Have you talked to your supervisors about your concerns?

**Student 1:** Yes I did but they just brushed me off. It made me feel worse and now they are not responding to my emails or giving me any feedback.

**Student 2:** Perhaps you and your supervisor have different expectations You could try once again to ask to meet to discuss your concerns about that very issue. What do you think?

**Student 1:** OK I will try.

**Student 2:** If that does not work you could ask the coordinator of the doctoral program for advice.

Many of the difficult conversations supervisors need to have are around progression issues or where the work is simply not at the standard required, even after repeated feedback and discussion. In preparing for a difficult conversation, it can be helpful to seek the views and input of other members of the supervision team. As a team, supervisors can work together to help the student to understand what is required and develop a plan to get on track. It is useful to have some potential strategies available to suggest and that supervisors are up to date on the support services that the university can offer and how they can be accessed.

Generally, we have found that students do appreciate this type of discussion even though it can be difficult, as often if we as supervisors have concerns about progress, students also have worries in this area. In fact, research findings have shown that students who are struggling with progression experience depression, anxiety, and stress (Barry et al. 2018). Thus, it is important to notice this and to raise concerns and work with students to develop support plans as soon as possible. Most universities have access to counselling services and study skills workshops, and students should be told about these avenues of support. One of the most difficult issues supervisors can face is where there is a sense that, even with a lot of input and assistance, the student is not going to be able to produce a work

that meets the requirements of the degree (Jackson et al. 2009). This can be a very difficult issue to raise and can happen for various reasons, but a common reason is where students are simply unwilling or unable to commit the time necessary to complete the degree. Despite the difficulties of raising these issues, there is always the imperative to be honest with students and to accurately record episodes of feedback that have been given. For more of a discussion on progression issues, see ▶ Chap. 6.

**Conversation Box 4.3 What Can Cause Concern for Supervisors**

**Debra:** Where feedback is not engaged with – not taken on board or refuted, and where work is not of the standard required. With the latter, this is usually addressed quite readily with a student who will engage well with feedback but can become frustrating when even after continued feedback there is no real development of the work.

**Kim:** Manipulative behaviour, with students going from one team member to another can be very difficult to manage. Behaviour like that often results in fracturing of the team which causes upset for everyone. I have personally witnessed this leading to the destruction of the team and relationships between members. Even though the student completed the candidature and we were able to restore the team to ensure satisfactory completion, the student's relationships with team members were irreparably damaged.

**Patricia:** I always get concerned when students start to avoid meetings. Even though I do understand that avoidance may sometimes seem the easier option, it is really important to stay connected with the team and the research community. Failing to meet milestones is a flag to me that the student is struggling.

Difficult conversations may occur at any time in the candidature and can include a range of issues, such as what are perceived as interpersonal conflicts and differing views between team members. Once again, these need to be addressed early. When difficult conversations are necessary, it is important to clearly and accurately document the conversation so that all parties remain clear about the issues and the agreed outcomes. Sometimes additional help and support is needed to help resolve issues, and this is where university resources can be very helpful. Supervisors and students are both able to access additional help through various university structures such as graduate schools and research higher degree coordinators.

## 4.7 Understanding and Recognising Conflict

The resilience of this supervisory relationship is a crucial issue. Any breakdown in this important relationship is distressing and can be traumatising for students and staff alike. Having differing expectations of the relationship can be a cause of tensions and, if this is not addressed, can become a source of conflict. In some situations, negative behaviours can occur on teams, and it is very important to recognise

these as early as possible and introduce strategies to mitigate and eliminate these behaviours. This is important because the quality of the student experience and the eventual outcome of the candidature are greatly dependent on the quality of the supervision relationship, and so anything that has the potential to damage this relationship and make it unsafe for any party must be recognised and mitigated. Splitting behaviours are examples of difficulties that can occur. Splitting is a destructive and hostile dynamic that involves personal attacks, blaming, and projection (Eddy 2016) and is a strategy to divide or split the team. The sorts of behaviours that can be seen are excluding or marginalising one or more team members and may involve cutting people out of communication, demonising of any team member, and undermining or allowing the undermining of any team member. Such behaviour is obviously highly threatening to the ability of the team to be successful over time and so should be identified and nipped in the bud as soon as possible. In our experience, this behaviour seems to occur more often in situations where breaches of boundaries have occurred.



**Conversation Box 4.4 Managing Conflicting Advice and Feedback**

**Debra:** It is very important that students get used to and accept that there can be multiple ways a work can be read and that multiple readers will provide various views on the work and that they will not always be in accord. To me, doctoral students needs to be able to deal with that and to turn that to their own advantage and use that feedback to strengthen their work. I advise them to consider carefully all of the feedback and then to make a decision about what is going to be the best and most useful way for them to go. I will ask them to prepare for a ten-minute discussion at the next supervision session, where we can hear the students response to the feedback, including how they are going to take on and address the feedback they have received, including conflicting feedback. I have found this approach also helps to reinforce the student's role of driver of the work.

**Kim:** I know that students often complain that they get confused when they receive varying feedback from the team. However, I agree it can be useful as this often occurs when we get feedback from article reviews and research funding bodies. As emerging scholars, students need to develop this skill.

**Patricia:** Being able to engage with and consider feedback on work is an important skill for scientists and scholars of all levels. Sometimes there can be multiple opinions and comments on the same piece of work and it's not at all unusual that these are sometimes conflicting. I encourage students to view this feedback as a real intellectual gift and take what is useful and what will strengthen the work. As students break new ground intellectually this type of feedback can be a gift.

**Reflective Exercise 4.1**

Rhama has had several meetings with her students and has put a big effort into trying to get to know the students and their work and understand her role on the team. One of her students has started emailing her without copying other team members in to the emails, even though Christine (as team leader) has made it clear that all emails should be copied in to the whole team, to ensure everyone stays up in the loop with communication. Today the student came to Rhama's office to say how much she enjoyed having her on the team. During the conversation, the student said that Christine was a difficult person and that she was very critical and slow to give feedback and also that she had students who were favourites, and this made it hard for her. Rhama felt uncomfortable with this encounter.

1. Why do you think that Rhama was made uncomfortable?
2. What do you think could be happening here?
3. How should Rhama respond to this meeting with the student?
4. What steps could Rhama take in this situation?

## 4.8 Strategies to Facilitate the Resilience of the Relationship

As we have noted throughout this text, a healthy relationship between the supervisory team and the student is the cornerstone of success. When this relationship fails or becomes toxic, the potential for a successful PhD outcome/completion is threatened. It is therefore in the interest of all parties for the supervision relationship to be successful. As the relationship occurs over a prolonged period, supervision relationships need to be able to stand the test of time, and it is important that the quality of the doctoral supervision relationships remain a priority. So, it is important to embed strategies to facilitate the resilience of the relationship. As discussed in ► Chap. 2, one way of doing this is to embed strategies to facilitate the relationships essential to the successful completion of a doctoral program into the pedagogy of the program. There are a number of ways this can be done, and we talk about some of these in ► Conversation Box 4.3. What is important to remember is that doctoral students can become quite isolated and this can lead to a dependence on supervisors that may not be totally healthy and sometimes there is the potential for parties in the relationship to seek to have a closer relationship than is necessary or healthy. To avoid these situations, we try to reinforce a sense of community for our students to help them also build connections with other students that can provide them with peer and social support over time.

Acknowledging that the supervisor/student relationship has an inherent power imbalance is crucial, and no matter how well you get along together, it is important not lose sight of the power issues. The power issues may mean that a student could find it very difficult to speak up on certain matters and may find it difficult to refuse requests from supervisors. Careful thought and acknowledgement of the power differentials are crucial as is anticipating conflict.

Disappointment is also a feature of life for researchers and academics. We have all experienced the disappointment of not getting a grant or promotion or having a

paper rejected. We have found it is important to openly discuss issues around disappointment with our students and how to deal with disappointment in the context of academic life and research. Resilience in the face of disappointment is important for students during the doctoral candidature and also for life in the post-doctoral years.

**Conversation Box 4.5 Pedagogies that Support the Resilience of the Supervisory Relationships**



**Kim:** I meet with all my students individually every 2 weeks in a team meeting. In addition, I have a joint student meeting every week on Monday morning. In that way I maintain close contact with my students and that helps me to identify issues early. I also tell students they do not have to wait for their allocated meeting time to ask me a question; I always make them my priority through email.

**Patricia:** Establishing clear milestones and expectations is important as part of the relationship. Different students will have varying expectations but ensuring individuals are emotionally equipped to deal with the stress of a doctoral program is important. Encouraging students to engage in the academic and scholarly life of the university can be very useful. Often the perception of a lack of structure in the day can be derailing for students. I really encourage students to see the PhD as a job, particularly full time students. Being open that it is acceptable to discuss obstacles and frustrations, as long as this is done in a professional manner, can help in identifying signals of failure to progress.

**Debra:** I have found it really useful to ask students to participate in a learning dyad with another student who is at the same stage as them and then encourage them to meet up for coffee and get to know each other. Over the years I have found that students have really benefitted from the social support they can provide to each other, and seen how that can improve their engagement and learning. So I try to create opportunities for students to support each other and not become over-dependent on the supervision team.

**Reflective Exercises**

1. In a journal club in your school, a faculty member outside of your supervision team questions your methodology and implies that it is not appropriate. How would you bring this up with your supervisor?
2. It is 5 weeks since you provided your manuscript to your supervisor and you have not yet had any feedback. How could you address this matter with supervisors respectfully and strategically?
3. As a supervisor, you feel that the student is trying to shift your professional relationship from support to a counselling one. Every supervision meeting, the student bursts into tears and tries to shift the discussion to personal matters. How would you approach this issue?

## Template 4.1 Student and supervisor agreement

| *Topic area* | *Prompts* |
|---|---|
| *Supervision meetings* | When and how often will they occur?<br>Who will attend and where will they occur?<br>How long before the meeting will the student send the agenda and writing for discussion?<br>When will the student send the meeting minutes to the team and how will these be documented? |
| *Health and safety* | Have any health and safety issues been identified?<br>If so, how have these been addressed?<br>Has the risk analysis for data collection been conducted?<br>If so, what issues are to be considered and monitored and by whom? |
| *Feedback* | What type of feedback does the student expect?<br>What type of feedback does the supervisor provide?<br>Will feedback change as the student progresses? If so, how? |
| *Authorship on resulting papers* | Who will take the lead on developing and writing papers?<br>Who will develop the plan for the paper and how will contribution of team members be determined?<br>How will authorship be attributed and who is responsible for initiating the conversation?<br>How and by whom will decisions be made about appropriate journals? |
| *Student activities* | How many hours of additional work is the student undertaking?<br>Provide details and agreed timeframes<br>In which university or faculty activities is the student participating?<br>What plans are there for conference attendance/dissemination of research?<br>Are there travel requirements related to the research?<br>Who will undertake booking requirements?<br>Who is responsible for accessing travel advice? |
| *Project funding* | Have opportunities for funding been discussed?<br>If so, what needs to be followed up?<br>If funding received, who will oversee expenses?<br>What funds are available to the student?<br>How will funds needed for the project be accessed? |
| *Intellectual property (IP)* | Are there likely to be intellectual property (IP) issues arising from the project?<br>If yes, who will be responsible for managing these?<br>If industry involvement, what IP agreements may be necessary? |
| *Ethical issues* | Does the project require ethical approval? If yes, which ethics review committee will the project be submitted to?<br>Who will prepare and submit the ethics application?<br>Who will prepare and submit the ethics final report? |

**Names and signatures including witness:**

**Review date:**

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# Feeding Back and Feeding Forward

## Contents




D. Jackson et al., *Successful Doctoral Training in Nursing and Health Sciences*, https://doi.org/10.1007/978-3-030-87946-4_5

### Student Reflections

*"The open and honest feedback and discussion during these supervision session(s) helped improve my scholarly thesis writing skills, critical analysis, including coherence and cohesion in argument creation and justifications. In addition, constructive and written feedback from the supervisors to improve the quality of my thesis and manuscripts for publication purpose was helpful. Two of my supervisors were very experienced senior scholars, academics and writers who were extremely helpful in giving me ongoing constructive feedback, support, and encouragement throughout my PhD journey. Their input was invaluable".*

***

*"I had to train myself to not be defensive when I got feedback as a student. I did find it difficult sometimes. I guess it's in my DNA to defend my work and I had to learn to suspend that and focus on and consider the alternative points of view that were put to me. It's only now I am finished and supervising students myself I realise how burdensome that must have been to my supervisors".*

***

*"When I submitted work to them for review and feedback, it was typically my third or fourth draft of a painfully thought through and prepared piece of writing, spell-checked and grammatically correct! They were incredibly respectful of the process that I needed to work through before sharing ideas and feeling comfortable enough to challenge my thinking and expose my vulnerabilities. They never pushed me too far – just enough to get the best out of me".*

**Upon Reading this Chapter and with Further Reflection, Readers Will Be Able to**

- Describe the importance of feedback and feedforward in doctoral supervision
- Recognise the elements that constitute quality and constructive feedback
- Acknowledge and discuss various approaches to and strategies for delivering feedback
- Recognise the supervisor and student factors influencing how feedback is delivered and received
- Understand feedback as a reciprocal, dynamic, and iterative process

## 5.1 The Importance of Feedback in Doctoral Supervision

Providing regular, quality, and constructive feedback is essential to effective supervision and to student progress, success, and growth; however, there is little discussion about feedback at the doctoral level. Research findings suggest wide interpretation of what constitutes appropriate feedback for doctoral students and highlights student feedback as an unproblematised and largely taken-for-granted aspect of doctoral supervision (Jackson et al. 2021). It is important to talk about feedback and its role in doctoral studies very early in the relationship with students and talk about the nature and purpose of feedback and feedback as a two-way street and explore preferred ways for individual students to receive feedback.

Differences in perception around feedback are a common cause of dissatisfaction and frustration on the part of both students and supervisors.

Understanding and employing feedforward, defined as feedback that "directs the author forward to the next level of development" (Carter and Kumar 2016:76), can be very useful for students to guide future work and progress as they take the next steps forward. However, many students take the term feedback quite literally and negatively and consider it only in relation to work already done. This is where the importance of understanding the concept of feeding forward is so important. Comment on work in draft or already done provides a means of feeding forward and signposting issues to be carried into future work.

Ideally, in the context of doctoral training, feedback results in intellectual advancement, progression, and enhanced quality of the work. However, in reality, the process of feedback can be fraught and difficult (Jackson et al. 2021). In some situations, feedback (though provided with the aim of being helpful and constructive) results in students feeling disempowered and discouraged, therefore having the opposite effect to what was intended. When people feel criticised or critiqued, they can experience a range of emotions that can range between feeling intellectually challenged and personally offended (Jackson et al. 2009).

How the feedback is perceived is part of who we are and what we bring to the relationship. For some people, critique is hard to accept, and the emotion blocks the message that is being conveyed, meaning the student loses the value of what is being offered. The thing to remember with feedback is that it is not personal – feedback is offered as a way of encouraging deep learning and intellectual growth. It is a way of receiving information that can help with subsequent writing and research activities (Carter and Kumar 2016).

**Conversation Box 5.1 Reflecting on Feedback**

**Student 1:** I just got feedback on that paper I told you I submitted to my supervisors. Heaps of feedback; so much it seems overwhelming and I feel like they are just being too difficult.

**Student 2:** I used to feel that way but my supervisors advised me to try to think of feedback as a gift of expertise, time and opinion.

**Student 1:** It is hard to see it that way right now for me but I guess I should try to see it as positive.

**Student 2:** You should; if they did not give you the feedback you would not have the opportunity to develop further as a scholar, a researcher.

**Student 1:** How do you deal with it then?

**Student 2:** Just take each comment and deal with it individually. I usually start with the easy ones first.

**Student 1:** Easy for you to say. I have to manage the feedback with the team now.

**Student 2:** Read the comments and then leave them for a while. Go away, have a cuppa or whatever, and then come back to them later.

**Student 1:** Ok, I'll try that.

## 5.2 What Is Feedback?

If feedback is to be optimally useful to students, it is important we develop shared understandings about its value, importance, and nature. Feedback is a term that has many definitions and meanings, depending on context (including how and by whom it is given), but essentially, in educational settings, feedback is understood as an element of the learning trajectory in which students acquire information about their performance. Feedback can take many forms – it can be "overt or covert, implicit or implied, solicited or uninvited and actively or passively received" (Jackson et al. 2021). However, feedback is not only about highlighting issues of concern or areas for improvement. It is also important to highlight and draw attention to the positive and exciting aspects of student work.



Praise and positive comments as well as suggestions for moving the work forward are very important to helping to ensure that feedback is not experienced in ways that are overwhelming, discouraging, and disempowering. For feedback to be optimally useful, all parties need to be active and involved in the process, and able to understand and evaluate the feedback, in order to make a conclusion on its usefulness to them. We have found it is important to ascertain the forms of feedback that students are most comfortable with. Having said that, we also recognise that students need to be able to work with feedback that comes from a range of positions and that may be unsolicited.

The idea of active engagement clearly shows the interactive, co-creative, and dynamic elements of feedback and the need for shared meanings. Relational pedagogy, the approach to teaching from which co-creation evolves, places the relationships at the centre of teaching and learning. Co-creation occurs when students and teachers work together and recognises that students bring valuable perspectives and opinions to the teaching and learning encounter (Cook-Sather et al. 2014). The co-creative aspect of feedback can be exciting as all parties work together in a democratic way to develop new and insightful outcomes from the work in a collaborative, partnership model leading to significant benefits for both students and their supervisors (Nygaard et al. 2013). In regard to feedback, this means the feedback provided to a student is offered in a partnership approach that respects all team members' input and opinions and values the student's ability to engage with the feedback as an equal member of the team.

**Conversation Box 5.2 Feedback in Doctoral Supervision**

**Debra:** There are many ways we can give and receive feedback. However, I have found students thrive with feedback when it is given in a way that is respectful of them and their work and where there is opportunity to discuss and question the feedback. In my experience, many students prefer a mix of written and conversational feedback – the chance to question, clarify, and rebut feedback. Being able to rebut and respond to feedback is also an important aspect of doctoral training and helps prepare students for viva and other events where they may be questioned about their work.

**Kim:** I agree Debra. Spending the time to go through feedback together is important, especially when there is a lot of feedback to be delivered. I always try to end on a positive note and assure the student I am confident of their ability to undertake the required changes and assure them I am available to assist further if necessary. I also refer them on to additional learning opportunities within and without of the university that may help them with skill development. It is always important to remain positive.

**Patricia:** I think exposing students to a range of feedback, written and oral, beyond the supervision team including peers and colleagues can be really useful in normalising the role of critique in the scientific endeavour. Supporting and engaging them in scholarly peer review can be useful in understanding the importance and value of thoughtful and constructive critique. Often sandwiching critique between positive elements can be useful in fostering confidence and increasing enthusiasm.

## 5.3 Approaches and Strategies for Providing Feedback

The relationship and alliance between students and supervisors is the primary setting within which feedback is given and received for doctoral students. However, within doctoral candidature, there are many other ways of ensuring that students get feedback, adequate to support their growth, in addition to the primary relationship within the supervision alliance. Most universities provide fora of some sort in which students can present their work, and get feedback from others, external to the supervision team. These fora and seminars can take various forms, including annual presentations to wider faculty and students, and processes such as confirmations and defences, which allow students to submit their work to a wider audience in both written and oral form, for the purpose of comment, critique, feedback, and feedforward.

Supervisors can also adopt a pedagogy to support the regular provision of feedback to students in various forms and from varied sources. We personally work to create opportunities and encouragement for students to provide peer feedback to one another and have found implementing such strategies has additional benefits in that they can be confidence building and help students become accustomed to responding to being questioned on their work. Furthermore, it is good for students to gain experience in giving comment, critique, feedback, and feedforward to others. We have found the experience of providing feedback and feedforward is beneficial to students and helps them to consider how to deliver feedback and gives them a new insight into the nature and purpose of feedback. Some students benefit from the use of a feedback template, to help them become accustomed to receiving and giving feedback (see ▶ Template 5.1 – Feeding back and feeding forward). Incorporating dissemination strategies into each student's candidature plan is another important means of seeking feedback for students. Submitting papers to peer-reviewed literature and getting anonymous peer review are a great way to have experts from beyond the team comment on the student's work at various key stages

of the work. This is also a great exercise for students to be supported to learn how to thoughtfully and reflectively address critique and feedback of their work. It is also important to convey to students that published papers subject to peer review are the greatest insurance for examination at the end of the journey.

**Thought Box 5.1 Feedback Is Not Only from Supervisors**

There are many ways of receiving feedback on study other than that which will come from supervisors. Submitting publications for peer review as already discussed and developing a community information sheet to communicate with other students and asking for feedback are two ways. Some projects have an advisory group of consumers and stakeholders, and presenting to these people regularly is another important source of feedback. Many universities provide colloquia and other fora to share information and receive feedback. That feedback is essential for the development of research that is co-created and conducted in and with community. The feedback from community is invaluable; there is a lot to be learned from with community members, participants, and consumers.



There are various ways feedback can be given by supervisors, and chief among these are verbally during meetings and in the shared spaces that can be created within the written text. We advocate a mix of written and verbal feedback. Written comments constitute important feedback and feedforward, because students can respond to comments in writing, creating a written, ongoing, and iterative collaborative dialogue and exchange. Written comments can form the basis for subsequent discussion and conversation, after a period of reflection of engaging with the written comments. Verbal feedback and discussion provide an important means of interactive dialogue to elaborate or seek clarification on written comments. We assert that written feedback is essential and gives more fixed record of thoughts, views, and comments than the spoken word, which is transitory and fleeting. In fact, in our experience, many students request to audiotape discussions with supervisors, to assist them in holding the conversation as students have told us that it can be difficult to hold the entirety of the conversation in their memory. Written feedback means that students can reflect and respond in their own time and after consideration. Taking time to reflect on progress made through reviewing cumulative versions of documents can be useful.

**Conversation Box 5.3 Some Strategies for Creating Feedback Opportunities**

**Kim:** It is important that feedback is offered regularly by the supervisory team; all supervisors should have a turn at being the first to read and provide feedback to the student. In addition, the team should all meet together to discuss the feedback where possible. If not all members are present at the supervisory meeting, it is essential that the student sends a short email to remind all team

members (and those not present) of the issues discussed and actions to be taken and by whom.

**Patricia:** The model of group supervision can be really useful for providing feedback opportunities. Not only does it provide many more eyes and ears on the work but can also be useful in normalising discussion, debate and sometimes respectful disagreement as part of the scientific process. As in all group settings, creating group norms and processes is important and this part of the role and responsibilities of supervisors to establish and monitor activities.

**Debra:** I try to create lots formal and informal feedback opportunities for students throughout the duration of the candidature. One of the most useful is through writing groups and activities in which students are able to write intensively and obtain prompt feedback from peers. Submitting papers for external peer review is also a great way of getting additional feedback for students.

## 5.4 Factors Influencing How Feedback Is Delivered and Received

The supervisory relationship constitutes a primary shared space within which feedback and feedforward can take place. Indeed, it is this relationship, which is the context or framework within which feedback occurs. This is a key reason to nurture the quality of the relationship(s) between students and supervisors. In our experience, we have found that where the relationship is strong and the student feels safe within it, the feedback process is smoother.

Feedback on writing can be particularly time-consuming and stressful for students and staff alike. Students can be overwhelmed and demoralised receiving this feedback, and staff can find it frustrating and wearisome to provide (Carter and Kumar 2016; Jackson et al. 2021). We know it can be difficult for supervisors to know how much feedback is appropriate when it comes to writing (Jackson et al. 2021) and that there are decisions to be made around correcting grammar and editing work or simply commenting that such corrections are needed. Supervisors hold different views on this, and in our view, it is not the role of supervisors to provide this nature of line-by-line feedback. Some (not all) supervisors may be prepared to provide this feedback on sections of the work, to help students see what is needed as feedforward strategy, and then ask the student to carry this through the remainder of their work. Regardless of where supervisors stand on this issue, we argue it is the role of supervisors to highlight where improvements are needed and to refer students to available support and resources. Having said that, students who continually submit careless work do generate a lot of work for supervisors, and it is frustrating going over the same tasks and issues over and over.

One of the most important elements of feedback is to ensure clarity and a pathway forward. Feedback that lacks clarity is not helpful and can cause frustration for students who may not be entirely sure of what is required and supervisors who believe they have provided feedback that has been poorly addressed. This means

that students will be less likely to benefit from the effort supervisors put into providing feedback. We suggest that written feedback is always followed by a discussion to ensure shared understandings and that the student is clear on what is required.

In contemporary student-centred approaches to learning, feedback should, however, be considered as not only a way of providing information but also a way of negotiating meaning (Ajjawi and Regehr 2019). As a result, feedback is reconceptualised as a form of literacy where 'feedback literate' students have a specific set of skills and attributes (Sutton 2012). These attributes help students to make the most of feedback. Many students coming to doctoral studies have low levels of feedback literacy (Burke 2009), which means they may not be confident to act on feedback and can affect the ways they receive feedback. Some students can become very defensive when given feedback (Jackson et al. 2021), and some can even get all the way through their doctoral training never developing feedback literacy. When students are defensive, this represents a form of stress for staff who may decide that the emotional burden of providing the feedback is so overwhelming that they choose not to give feedback (Jackson et al. 2021). This is worrying from a student learning point of view as it may mean that students are deprived of essential critique and information that could guide their work.



Some students are avoidant of potential critique and will try to identify a member of their panel who will only comment on superficial issues, such as typographical errors and the like. Again, this is a wasted opportunity. Part of doctoral training is being able to engage authentically with critique and feedback. We encourage our students to actively seek feedback on their work through varied activities such as conference presentations, submission of their work to peer-reviewed journals, and other means. When our students do receive feedback from these sources external to the team, we use these as a basis for a collaborative conversation within the shared supervisory space. We have found students can benefit enormously from these experiences.

**Thought Box 5.2 Reflections on Feedback**

**Time:** It is important to allow adequate time for feedback to be provided. We usually ask that students who want feedback on written work at a meeting provide that work at least 48 hours ahead of the meeting. However, sometimes longer is needed if the document is very long. As a rule of thumb, we suggest allowing a week per chapter for feedback. Supervisors should ensure that feedback and feedforward are provided in a reasonable timeframe. Where there are supervision teams of two or more people, this may require negotiation among the team, as to whether all supervisors will return feedback independently, or if the team will provide a single lot of collated feedback from the whole team, and then what order that supervisors will assess the work in.

**Nature and form of feedback:** It is useful to decide as a team the most useful form for delivering feedback. For example, we have found that going

through feedback in team meetings is more useful if the student has had the feedback ahead of the meeting and has had a chance to read and engage with it prior to the meeting. This can work well for a couple of reasons. Firstly, it can be quite difficult to take sustained critique and feedback from multiple supervisors in a meeting, and using all of the time in this way may not be to the students' best interest. It also means the student has been able to reflect on the feedback and identify the feedback they feel they can deal with independently and the areas of feedback where more supervisor input is needed.

## 5.5 Feedback as a Two-Way Process

Feedback should ideally be reciprocal, and it is important that students are able to develop their own skills in giving feedback. In a relational pedagogy, students and supervisors engage with the feedback together in as partners in the process. Supervisors who champion this approach to teaching are likely to model feedback as a collaborative and co-creative approach. We encourage students to provide feedback to supervisors on their supervision approach, and many universities provide students these opportunities through annual review of candidature processes. Other activities such as student presentation sessions and student participation in peer review activities are important to helping students gain experience in providing peer review to others. We encourage our students to register as peer reviewers on relevant journals during their candidature. We have found that encouraging students to these activities not only helps them better learn to self-correct their own work but also helps them to think about how to deliver feedback in ways that are useful for the recipient and to understand the crucial role of feedback for scholars and scientists throughout career.

## 5.6 Handling Feedback

As we said earlier, feedback can be difficult to handle at times. It is however important for students meeting with the supervisory team to discuss feedback to remain calm, to listen carefully to what is being said, and to take notes if possible. It is always a good practice to review notes and then encourage questions about any issues that remain unclear. Always keep an open mind and be ready to address feedback; students should try to remember that the feedback has been provided with good intent and indicates a time commitment on behalf of the supervision panel. That commitment and contribution should be treated with the respect it deserves. It is also important to remember that taking critique and feedback are foundational to becoming an independent scholar and researcher.

It is also helpful to remember the feedforward aspects of feedback. So when feedback is provided, it is important to incorporate this into future work. In this way, skills associated with self-critique and the ability to self-edit will be developed.

**Thought Box 5.3 Responding to Feedback**

**Supervisors:** There are few things more frustrating than spending hours reading student work, providing thoughtful and detailed feedback, and then having the student react badly to it. Bad reactions can include sulking and/or anger, ignoring or dismissing the feedback with no acknowledgement or discussion, appealing to other supervisors, and other intellectually immature responses. The situation is made worse when work is resubmitted again for further consideration and feedback with previously identified errors uncorrected. Receiving careless sloppy work is always disappointing. It is important when these things happen that they are raised at meetings, so that students can come to understand and learn appropriate responses to critique and feedback.

**Students:** It is understandable to feel disappointed and sometimes even frustrated when getting negative feedback and critique. Remember that supervisors want students to do well – their role is to prepare the student for rigorous critique and examination. Supervisors have also experienced this feeling of disappointment many times over as students themselves and then again (likely many more times) as researchers. Though feedback can sometimes be difficult to take, remember the comments are about the work, not the person. Remember too that supervisors provide feedback when they are asked to. So if careless, sloppy work is submitted along with a request for feedback, it is predictable that negative feedback will follow. So it is important that students get their work as polished as possible before submitting for supervisor review.

Generally, responding to feedback does result in work that is stronger and more robust. However, if there is a sense that critique is undeserved, students must be prepared to manage that as an essential member of the team. Students should be prepared to seek clarification, ask questions, raise the issues, and defend the position they have taken. In this way, all parties are respected, and the relationship is not damaged. Being able to thoughtfully and respectfully refute critique is an essential aspect of doctoral training and shows maturity and growth as a scholar.

This is an essential skill all researchers must have and one that will be beneficial to students in their future lives and careers.

**Reflective Exercises**

1. Consider your previous studies. What forms of feedback have you received? Was it useful? Could it have been improved?
2. How do you deal with the personal emotions when you first receive critique?
3. Identify ways of responding to critique which are thoughtful and constructive and prepare you to engage in scholarly and thoughtful dialogue.

**Reflective Exercise 5.1**

Rhama has been asked to provide written feedback on three chapters of a student's thesis. A preliminary read of the work reveals it is quite sound, but Rhama notes many grammatical issues and poorly written sentences. There are also quite a number of assertions unsupported by evidence and information uncritically accepted as fact. Rhama has a talk with the supervision team, Christine and Brad, about the form the feedback should take. Brad has said that as he is not an academic, he doesn't feel it is his role to provide any written feedback but he is willing to join a feedback discussion. Christine has indicated she does not approve of "track changes" feedback and expresses a preference for comments in margins along with a covering email.

- What are the forms that written feedback could take?
- Why do you think Christine has these views in relation to written feedback?
- How do you think Rhama could respond here?
- How could Rhama ensure her feedback is informed by the elements of feedforward?

### Template 5.1 Feeding Back and Feeding Forward

| |
|---|
| **Feeding back and feeding forward**<br>*Turn feedback into feedforward by thinking how you can use this feedback in future work.* |
| **Student: Supervisor:**<br>**Date: Date:** |
| *What was done well and why?* |
| *How could the work be improved?* |
| *What could be done next?* |

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# When Students Get Stuck

## Contents




D. Jackson et al., *Successful Doctoral Training in Nursing and Health Sciences*, https://doi.org/10.1007/978-3-030-87946-4_6

### Student Reflections

*"When you realise that you are almost halfway through your PhD programme, the time flies with less writing done. You ask yourself, what have I been doing? Your team tells you that you are not going to successfully complete your studies unless things change. They challenge you to bring the best out of you, then take you step-by-step with to-do-list, short and long-term objectives, until you see the light at the end of the tunnel, then you realise; you are going to be fine".*

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*"I had a few challenges - deadlines, a certain level of loneliness, unexpected family/personal challenges that navigated towards an almost total loss of motivation and making the program overwhelming".*

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"*I was at that time, something of a perfectionist and also experienced a lot of imposter syndrome (I was first person in my family to go to university and undertake a higher research degree). This meant that I wasn't very good at submitting initial drafts of work illustrating partially-formed, developing ideas – a very vulnerable position, but somewhat expected of a PhD candidate".*



### Upon Reading This Chapter, and with Further Reflection, Readers Will Be Able to

- Describe what is meant by the term progression
- Recognise signs that can indicate a student is having progression issues
- Discuss strategies for working with students to identify progression issues and develop strategies for moving forward
- Identify sources of support for students and supervisors experiencing progression issues

## 6.1 Measuring Progress

Monitoring and measuring student progress is an important responsibility for supervisors and an expectation that students and most institutions hold. As we have previously highlighted, the importance of implementing a pedagogy that keeps the student engaged with the team and the faculty is important here. Not only does this assist the student in feeling a sense of belonging and connection with the team and institution; it does assist with progression and perhaps makes it easier to recognise progression issues. Having said that, it is important that we reflect on the nature of progress in doctoral studies and how it might be determined. Generally (in this context), the term progress refers to markers or evidence of some sort that can tell us if and how a student is continuing to evolve and make measureable movement towards achieving their goals and successful completion of their studies.

However, the nature of doctoral studies means that progress for different students at particular time points can look very different and it can be challenging to identify a single measure (or set of measures) that will work for every student every time. This is because within the doctoral program it can be difficult to point to actual criteria that all students "should" have achieved at particular time points. Many institutions use the term "failure to progress", but we do not use this term because of its very negative connotations. We prefer think of progression issues more as a student being stuck and how we as supervisors can assist that student back to active progression through a process of reenergising and dynamic reengagement with their work.

In recognition of the differences in candidature for individual students, most universities have general processes for monitoring and review of progress for students, and these can take varied approaches. Generally, these aim to record continued progress and recognise and respond to any issues affecting progress in a timely manner. As we have noted, there are varied approaches to this. One approach is the requirement of students and supervisors to complete review of progress documentation that is submitted to some sort of research degree monitoring body who will review the report and act on any issues that are identified in relation to progress. The sorts of action will also vary, but often involve interviews with students and supervisors and the provision of support and assistance to develop a plan for addressing identified issues (for more on review of progress, see ▶ Chap. 4).

Students in many universities are also asked to present their work in regular (often annualised) student forums and seminars. In addition to the routine monitoring through forms and reports and annual presentations, some universities take more of a "milestone" approach, with students asked to present their work to a panel of people at various time points – usually three to four – in the candidature. These may occur before the end of the first year in which students may be asked to submit some written work as well as formally present (and "defend") their proposal and the end of the second year in which students may be asked to produce agreed evidence of progress and again in some sort of pre-submission seminar or event. In addition to these regular processes for monitoring and measuring progress, some universities also have a mechanism through which supervisors can initiate additional review of progress at any time.

## 6.2 Recognising When a Student Is Stuck

A doctoral degree takes several years, and its success requires that students make steady and consistent progress. As we have discussed in earlier chapters, it is important that students develop a timeline to guide their candidature and that there are frequent opportunities for the student to review the thesis plan with their team (see ▶ Template 1.1 – Thesis plan). It is important to recognise that many students also have considerable and pressing life pressures associated with factors such as caring

and cultural obligations, health and disability issues, and professional responsibilities. These are among the relevant factors for consideration alongside any reflections of student progress.

The nature of doctoral candidature means that most (if not all) students will experience at least one period where progression becomes a concern, to the student themselves, to their supervision team, and/or to the faculty they are enrolled in. Various factors can impede student progress. Among these in our experience are issues of confidence and self-belief such as imposter syndrome. Imposter syndrome refers to the internalised view held by some students that they do not really belong in a doctoral program and that it is only that they have somehow fooled people that they gained entry into the program. Imposter syndrome has been shown to influence student outcomes and academic progress (Ramsey and Brown 2018) and has been noted to be more prevalent in certain groups of students such as ethnic minority and mature-aged students (Ramsey and Brown 2018). This is of relevance to nursing and health professional doctoral students as many come to doctoral studies from what could be termed non-traditional backgrounds.



Another issue that can affect student progression is where the student is a perfectionist. This does not always cause problems but can do, and these students can find it hard to ask for help. This is a relatively common issue but can be hard to recognise and, if not recognised and managed, can sometimes become crippling for students. While a degree of perfectionism can be very positive, we have all had experience with students who can become blocked in a task because they are striving for perfection. The drive for perfection can slow things down, affecting progress as the perfectionist student can struggle with thinking the work is never good enough for supervisor review, and so may overcomplicate things or engage in delaying tactics around actually producing work. These students can struggle with feedback and sometimes can go to ground for weeks after receiving even very gentle feedback. This can delay timelines, putting the student under more stress. Regular discussion and review of work at various developmental stages and encouraging the student to participate in student events where they can discuss their thinking and gain in confidence can help here. We have found that drawing on the support of student counselling services can also be very useful in helping students struggling with perfectionism to manage their feelings about their work, to gain confidence, to recognise when enough is enough, and to help effective engagement with the feedback essential to doctoral studies.

There are also some logistical issues that can be both disheartening and frustrating. Challenges in obtaining ethical approval, recruitment, and other issues beyond the control of the student can result in the student being stuck. Expert supervision teams are often able to navigate these complexities requiring negotiation, diplomacy, and sometimes pivoting on the research direction. The COVID-19 pandemic provided a stark example of best plans being thwarted. In spite of this challenge, many students and their teams have been able to tailor and target their projects to the contemporaneous situation.

## 6.3 Why Students Get Stuck

Students come to doctoral work with various experiences and situations, and doctoral candidature can go on for many years. As we noted, the sheer duration of doctoral candidature means that most students will get stuck at some point or other in the course of their doctoral work. Students can get stuck for many reasons. Sometimes progression issues are related to the doctoral work and factors such as a changed research environment, and sometimes the cause of progression issues is personal, resulting from issues such as health issues, pressure of work, and financial or other personal matters.

One of the most common causes of progression issues in our experience is around time management – a crucial skill for students and supervisors. For many students, doctoral studies represent a new way of working that is quite different from previous academic work, which may have involved a focus on coursework. Successful doctoral studies require the ability to manage one's own time, to work independently with a sustained focus on a single project over a number of years. This can be challenging for students, particularly for those who are easily distracted. Most universities have an expectation that a certain amount of time is spent weekly on doctoral work, and many specify the number of hours that are required. Anything that means a student cannot spend the necessary time on the work can become a threat to progression. Managing all of the competing demands in their lives as well as the need many have to continue to support themselves financially means that many students are juggling multiple competing demands at any given time.

Many doctoral students will seek to supplement their finances through work within the academic department they are enrolled in, usually as either a sessional teacher or a research assistant. There are many opportunities that will come a student's way. Doing a doctoral degree is an exciting and dynamic period of professional life, and students get opportunities for development in all sorts of areas, including the chance to participate in teaching. Some universities actively encourage doctoral students to participate in teaching during candidature and even offer doctoral students the chance to undertake teaching training and gain entry-level teaching qualifications. While exciting on the one hand, things can rapidly get out of control if unchecked, and it is very important to be aware that a student's primary focus remains their own doctoral studies. We recommend that students only do a limited amount of teaching and other work and that supervisors closely monitor these activities. Students may find it difficult to decline opportunities and requests to help with teaching and marking and other labour-intensive academic activities. They can easily become swamped in this sort of work to the detriment of their own doctoral work. It is important supervisors support students to put their doctoral work first and to feel OK about declining extra work at any time throughout the candidature.

We have found that students sometimes underestimate the time required for a doctoral degree and how sustained the effort needs to be. We have also found that some students work better at different times of the day and the week. In lots of ways, doctoral studies can be a journey of self-discovery – through doctoral work, students learn how they react to feedback, for example, and it may take a while for students to work out their own personal study pattern. Another issue is where students get bogged down by overcomplicating things. We have seen this happen where students are sent away to complete a simple task such as clearly define one of their key terms. Weeks later, the student returns and has spent all of their time working on what should have been a simple task. Supervisors need to be aware of this pitfall and ensure they give students sufficient guidance on what is required.



It can take a while to notice that a student is not progressing as planned. Often in the early stages, it may appear that the student is simply having some difficulties – personal or otherwise – that, in themselves, are not enough to raise concerns. Nevertheless, over time – a period of weeks or months – the lack of progress becomes increasingly evident. Also avoidant behaviour may be a factor, where students may avoid coming to meetings, avoid coming to campus, or avoid submitting work for review. Sometimes students will attribute this avoidance to busy-ness, with various convincing explanations. Eventually comes a realisation that the student is simply not progressing, and the catalyst for this can be the review of progress meeting where progression is actively (and unavoidably) tabled as an issue and is the subject of focussed discussion.

Unfortunately when students get stuck or have problems with progression, there can be a tendency to blame their supervisors rather than accepting responsibility for the issues. For novice supervisors in particular, this blaming can be devastating, and they may need some help or advice coping with this if it happens to them.

**Thought Box 6.1 Some Common Reasons Students Get Stuck**

- Not spending enough time on their study
- Time management issues
- Superficial management of work that then leads to supervisor concerns
- Working alone and not attending student activities or events
- Not being aware of the relevant methods, literature, or theories of their discipline
- Not sharing their work with others through discussions and other mechanisms
- Not providing work to their supervisors so they can receive feedback to take them forward
- Difficulty holding focus and becoming distracted by other issues and opportunities
- Not engaging with or responding to feedback appropriately
- Lack of direction
- Loss of confidence
- Busywork at the expense of real progress
- Changes in the research environment
- Issues with perfectionism

## 6.4 Moving Ahead with Writing

Writing is a common cause of progression issues, and while each student may have different issues and problems affecting their writing performance, we have found that using a range of supportive strategies to assist in confidence building can be very helpful. Some of these strategies include:

- Encouraging students to work in larger chunks of time rather than small bursts and on a regular basis.
- Supporting students to make a plan and layout to structure their writing.
- Setting achievable and focussed weekly writing goals can be helpful for students who struggle with writing.
- Advising students not to throw anything away – they can keep drafts of their written work for later reference.
- Helping students to identify the best times of their day and week to write – this can differ for all people depending on their life and commitments.
- Encouraging students to try writing with others in a small group, such as "shut up and write" groups or similar.
- Discussing thoughts with other students to help reach clarity and confidence.

**Conversation Box 6.1 Recognising Progression Issues**

**Debra:** It can be hard to recognise at first because often students will give reasons for not meeting deadlines or attending to agreed tasks and milestones that can sound convincing, initially at least. They may allude to personal matters that have caused delay, or lack of access to necessary equipment, other parties cancelling appointments, or a mix of factors which on first hearing seem perfectly plausible. After a while, the student may produce some work but the work is clearly not developing and so even if the progression issues are initially concealed, over time it becomes apparent. In my experience students find progression issues to be extremely distressing and so, once we recognise the student is struggling to progress, it is really important to work closely with the whole team to support the student to get unstuck and back on track. Because the student is likely upset over the situation, it can be emotionally difficult – the student can sometimes be tearful or defensive. However, I have found that once we work together, have identified the issues and worked out some strategies to support the issues the student is facing, students are usually enormously relieved, and will often be able to approach their work with renewed enthusiasm.

**Kim:** I know that this can be a very complicated issue. I had a student once who seemed to use "smoke and mirrors" tactics very well to cover lack of progress. Whenever we asked for an update or evidence of work, she would produce fancy diagrams and figures. After a while, we had to tell her that we did not want to see any more of those but that she was to produce a number of words before the next meeting. She obviously found that very hard to do. After that we put her on weekly writing objectives and she managed to eventually get back on track.

**Patricia:** Procrastination and imposter syndrome can also be factors in moving forward. It is important to recognise that although the doctoral degree is fundamental in the life of a scholar it is not the final work. Focussing on the knowledge, skills, competencies and networks obtained in a doctoral degree are important. There will always be setbacks- delays in ethics approvals, recruitment challenges, manuscript rejections and delays. These are part of the lessons that are important to learn. Building resiliency and confidence are critical skills in not getting stuck.

## 6.5 Strategies for Re-energising and Moving Forward

The relationships between supervisors and student are so important in this situation. The realisation of progression issues can often occur concurrently for both student and supervision team, and for students, this recognition can be very worrying and distressing. Once the team has recognised progression issues, it is important to prioritise this issue, to discuss this within the team, and to organise a meeting with the student. This is crucial as doctoral studies involve a major commitment on the part of the student and so it is very important to promptly identify and mitigate (as much as possible) any issues impeding their progress.

One strategy that can be useful as a way of framing and raising progression issues is to consider the student's initial timeline. Reviewing the timeline together with the student can assist in seeing where the student is currently and consider that in relation to where they had planned to be at a particular time point. Furthermore, the timeline can also help to quantify the extent of the progression delay in terms of actual weeks and/or tasks that are now behind schedule. This simple process can be very helpful for students to get a sense of the extent of the issues and help them begin to formulate a way forward. One of the outcomes from this initial meeting could be to ask the student to produce a modified timeline to bring to the next meeting. Undertaking this task gives the student some cause and impetus to reflect on how they will use the time remaining in the candidature and to explore options for extension of time should that be necessary. Bringing the timeline along to subsequent meetings can also be a way of helping to recognise further issues.

Raising concerns about progress is a potentially emotive and distressing event for students, and it is essential that attention is paid to ensuring the student is feeling safe and emotionally supported. It is important to reiterate to the student that the supervision team is there to support them, and the purpose of the meeting is not punitive – it is to gain understanding of the issues to be able to respond to the situation and ensure the student is getting needed support. At this meeting, the aim is to identify the issues that are causing difficulties for the student and to work collaboratively with the student to develop strategies for moving forward. It is also important to realise that more than one meeting may be necessary before an actual plan can be agreed, and it can be useful for everyone to take some time to properly consider the options.

Prior to meetings of this nature, it is useful to ensure familiarity with the range of university-based support options available to students who may be having challenges or difficulties. These services are normally free to students, and staff within these services usually have considerable experience supporting students dealing with all manner of issues. They are also confidential. It is important that students are aware of these services and also know how to access them. We have found that involving the range of university supports to assist students having difficulties is enormously helpful to students and supervisors and can often be a key part of the solution. Involvement of these support services also can free up the supervisors to focus on the intellectual work, in the knowledge that the student is being well supported with other issues that may be making them stressed and unhappy and causing impediments to their work.

Once any issues and impediments are identified, the next step is to make a decision on whether a period of leave might be needed to allow the student some time out to work through any issues. If the consensus is that leave is not necessary, it is important to work with the student to develop a clear plan for remediation and mitigation to get them back on track. The plan should be realistic, achievable, and with clear and time-linked measures so that team members will be able to ascertain if it is effective within a reasonable timeline or if there is a need for further adjustments. The use of the daily diary (see ► Template 3.2 – Daily student diary) for a period of 4–5 weeks can be very helpful to support the student as they adjust to the new plan. Frequent meetings are also useful at this time, and it can be a useful strategy to have an extra short meeting once a week to just "check in" with the student. It may not be possible or necessary to have all team members present for this additional meeting. However, use of meeting notes and updates to the team will help ensure all team members stay aware of the issues and progress towards resolving them.

**Conversation Box 6.2 Working with Students to Help Them Re-engage and Get Moving Again**

**Patricia:** The thought of a "whole" thesis or even publication for that matter can be daunting. I find breaking a task down into discrete pieces using SMART principles can be useful. In some cases I even find getting the student to work in close geographical location to me can increase productivity and get them moving along.

**Kim:** I had a student admit to me that she had no idea what she was doing. She was completely overwhelmed and as a result, was experiencing emotional upset and was not turning up for meetings. When we did see her, she was always very polite and apologetic and promised to attend the next meeting and send us something to read beforehand. This however never happened. Eventually we had to insist she meet with us to discuss her work. It was at that time that she admitted she did not know what to do. We spent a long time with her that day and then set small tasks and met every week with her for several months to get her writing again. We also got her involved with a buddy and that helped her as well.

**Debra:** One example I can share concerned a student who had completed data collection and was due to commence data analysis. Over a period of months this student had read numerous additional texts and participated in some workshops about analysis but had not made any progress in working with the data. At no time did the student openly state they felt they could not do the task and remained well engaged with the team and the program throughout this period. Eventually after a few months, this student suddenly began to cry in a meeting, even though the discussion had not been about anything that would normally generate an emotional response. On gently questioning the student, it became clear that the student was having a crisis of confidence about analysis. We arranged some extra meetings where we did some analysis together as a team. After three extra meetings wholly focussing on analysis, this student regained confidence and was able to successfully and independently complete the task.



### Reflective Exercise 6.1

During the supervision meeting, the students *Review of Progress* form is produced for the team to work through and submit. Though the student is engaged with the work and working well at present, there have been some illness and also some personal issues that affected progress. Christine produces the agreed timeline at the meeting, and together the team ascertains the student is approximately 10 weeks behind the timeline. On that basis, Christine says that they cannot give the student a "satisfactory" and that in view of the delayed progress, the only option is to give the student an "unsatisfactory" for progress while still noting that the student is working well at present. On hearing this, the student bursts into tears.

1. What option would you have chosen in this situation? Why?
2. How could the team respond to the student's distress?
3. Consult the policies in your institution. What are the implications of an "unsatisfactory" decision to the student? To the supervision team?
4. What are the potential implications for making a false declaration on the form? To the student? To the supervision team?

### Reflective Exercises

1. Look up the processes for review of progress in your own institution.
2. What are the responsibilities of supervisors?
3. What are the responsibilities of students?
4. What supports are available to support supervisors and students who are experiencing progression issues?

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# Cultural Considerations in Doctoral Training

Contents




D. Jackson et al., *Successful Doctoral Training in Nursing and Health Sciences*, https://doi.org/10.1007/978-3-030-87946-4_7

### Student Reflections

*"My strong supervisors worked together in responding to my work. They were the solid rock that bears me up at my weakest and lonely moments in my PhD journey. I utilised their experience as a light in my path, and their invaluable knowledge has grounded me. In my periods of doubts, weaknesses and self-confidence, their belief in me was formidable. In my PhD journey, I felt fortunate and proud, especially when I hear colleagues complaining of the inaccessibility and long waits to respond to their drafts/work from their supervisors. My supervisors also encouraged me to aim at high-impact journals in publishing my work".*

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"*It's not easy working in research spaces that cross multiple disciplines and different cultural understandings, especially for students. If I were to point out the single most important factor in completing my PhD, I would have to say it was the support of my supervisors who were always available and always willing to listen. Without their support, as well as the support of the Indigenous Research Community we were part of at that time, I'm fairly certain I would never have finished my thesis and it certainly it wouldn't have taken the non-traditional, poetic and creative turn that it did. I will be forever grateful for the sacrifices made on my behalf and for the many friendships forged along the way".*

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*"When I arrived in Australia, it was a new life for me and my family. It was challenging as I came from overseas. My supervisors made my new life better when they warmly welcomed me and helped me to settle down into the university and the town. They even offered me airport pickup".*



### Upon Reading this Chapter and with Further Reflection, Readers Will Be Able to

1. Understand culture as a key factor to be considered in doctoral supervision
2. Discuss the essential skills required successfully supervise students from different cultural backgrounds
3. Identify particular issues for students from different cultural backgrounds and articulate how supervisors and students can work together to overcome these

## 7.1 Supervision and Cultural Diversity

Doctoral students, who have become increasingly mobile and diverse, including a large proportion for whom English is not their primary language, have many and varied needs and preferences to be accommodated within the pedagogy of supervision and the relationship with the supervision team. These students often come from across the globe, from high- and low-income countries – some are scholarship recipients and others are self-funded. There has been much written about the cross-cultural issues and the differing expectations of supervisors and international students. These issues include language, cultural differences in managing hierarchy,

separation from the familiar including family, separation from support, stereotypes, and time (Winchester-Seeto et al. 2014). International students enter the supervisory relationship with expectations about supervision that have been informed by the pedagogy they have witnessed in their previous studies and within their home countries. Given the supervisor-student relationship should imply a move from the hierarchical one to one of greater equity, undertaking doctoral work requires students to adapt to expectations that may be very different from what they have previously experienced (Elliot and Kobayashi 2019). It also requires supervisors to develop competence working with students from different cultures to their own.

The dominant Western culture exists in universities through the embedded beliefs, values, customs, and behaviours that prevail (Trudgett and Franklin 2011, p. 35); and these strongly hierarchical, traditional structures may negatively impact students who have a cultural background that differs from the dominant culture. Therefore, it is essential for supervisors to have an awareness of how university systems and structures can impact students from different cultures. Students need to be prepared to develop their awareness of the systems in which they are working and together with their supervisor(s) find culturally supportive ways to navigate the alien systems and structures as far as possible.

Relationships, as you have seen in previous chapters, are central to the success of doctoral studies. When supervising students from varied and different cultural backgrounds to one's own, there is a need for awareness of the importance and centrality of the supervisor/student relationships. Students may have travelled literally halfway round the world to undertake their doctoral studies and may have few local social networks and connections. Therefore, the relationships with the supervisory team and others within the research community that they are joining take on even more importance. For students studying internationally, it is very important to recognise the importance of their role in ensuring the development of a strong relationship with their supervisor and/or supervisory team. The strength of the supervisory-student relationship not only results in successful student outcomes, but has many other benefits including reduction of the stress of transition for students from different cultures, opportunities for student development (e.g. teaching, marking, research assistant work), goal setting, and thesis completion (Young et al. 2019).

## 7.2 Students from Different Cultural Backgrounds

Students coming from different cultural backgrounds may experience difficulty when transitioning into the new university system and the local community. It can be very challenging to establish in a new country and can take considerable time to build social connections in the new country. A study of six international doctoral students and six experienced supervisors that was conducted in Denmark revealed that the four major issues were differing approaches to learning, mismatched expectations on feedback, development of critical thinking, and bridging academic

cultures (Elliot and Kobayashi 2019). This study clearly shows the importance of shared understandings. Supervisors have an important role to play in communicating effectively to ensure shared understandings and to assisting students during their transition to the new country and institution and throughout the whole of candidature.

International students may not have had any pre-existing relationship with the supervisor team or the university they are enrolled in. This is important to consider when beginning the relationship with an international student. It is essential to take the time to develop the relationship, to spend some time getting to know one another. It is also important to recognise issues around power, hierarchy, and authority and how they are constructed in various cultures. We find it useful to talk about these types of issues. Failing to understand cultural variations in issues of this nature may mean that students from some countries may find it difficult to accept an invitation to join a social gathering or feel compelled to assist their supervisor who indicates a need for assistance in their private or professional life. As we have clearly stated, these types of issues highlight the need for clear and respectful boundaries. Using a strengths-based approach, focussing on attributes rather than deficits is important in building the student's confidence and fostering positive relationships in the supervision experience.



**Reflective Exercise 7.1 Building Relationships with International Students**

The holiday period is fast approaching, and Rhama knows this can be a lonely time for students as the campus is essentially closed for the holidays. Rhama is keen to show support for her new student from China by inviting her to her home for a meal with some of the other students and members of the supervision team.

- What factors should Rhama consider before doing so?
- How could Rhama help the student to feel comfortable to accept the invitation?
- What are some other ways Rhama could help support her student to transition to life in the new country?

## 7.3 Take the Time to Get to Know Your Student/Supervisor

We cannot state often enough how pivotal the relationship with the supervisors is to success, so taking the time to establish a relationship at the commencement of study is important. Supervisors should make time to get to know the students and their background prior to commencing supervision. It can be useful to add some time each week to spend with the student and to give them time to talk about how they are going in with settling into the new country or environment and what is happening in their life outside of the university. Many universities do have specialist support and activities available for international students, and we have found it very helpful to encourage students to participate in these activities.

The COVID-19 pandemic affected the role of doctoral supervisors. Many supervisors stepped up to provide support well beyond usual transition and academic issues. During the pandemic, we recognised that our international students were vulnerable for many reasons and adopted strategies to assist them as required. Strategies included ensuring students were safe in their accommodation and had sufficient warm blankets and clothing and ensuring they were in contact with the university structures who provided food packages when needed and supported students affected by sudden border closures to gain visas to return to their place of study.

Indigenous students will not only have the usual requirements of a new doctoral student but also are likely to have cultural and community expectations and obligations. These cultural factors need to be taken into account from the beginning of the candidature. Community engagement is a big part of Indigenous research and very important to Indigenous students. This crucial activity must be given the credibility and respect needed to ensure students feel comfortable to discuss this with their supervisor(s). Students should also be prepared to be open and transparent with their supervisor(s) about the obligations they have from their family and community and open to discussing these as the need arises.

Students also need to take the time needed to get to know their supervisor. This can occur in the allocated meeting times and by participating in events that the department or the supervisor hosts for students, such as group supervision meetings and other activities within the research community. Participation in these types of events can provide valuable opportunities to engage with members of the supervisory team and fellow students over a cup of tea or a meal. Such activities are really very helpful in building and strengthening relationships and helping student find their place in the academic community and get to know other students.

## 7.4 Academic Writing and Cultural Diversity

Academic writing can be a challenge for all students, and we talk about issues with academic writing more in ► Chap. 8. However, here it is very important to note that this aspect of doctoral training can be even more of a challenge for students for whom English is not their primary language. This is probably the most researched area related to students from different cultures. The different linguistic challenges for writing are particularly important for many international students, and these are also compounded by varying cultural and social expectations. These challenges, while often very impactful for students, are challenging for supervisors as well. Supervisors generally see first-hand now hard students work to convey their ideas in written form to the required standard of sophistication and generally will try very hard to provide feedback and feedforward on content, structure, and presentation on submitted drafts in ways that will encourage and help the student to continue to develop in this important area.

**Conversation Box 7.1 International Students and the COVID-19 Pandemic**

**Kim:** One of my international students had just completed a number of months field work in his home country when the COVID-19 pandemic became a global issue and all travel to Australia ceased very suddenly. We supported him to continue with his work over there as much as possible but it was very hard as where he lives there is no internet. To gain access to us he had to travel all day on a bus to where his sister lives as her village has internet access. We set weekly times to meet with and support him during that period. His wife is also studying here so she was left here for months without any support from him so we had to help her as well. It was a very hard time for them both. After many applications for entry to Australia, with many supporting letters, he was finally allowed to return.

**Debra:** The COVID-19 restrictions were very challenging for international students. We had a new student arrive in Australia right before the COVID-19 travel bans. For the whole first year of her candidature this student had to work from home. She did very well in some ways but in other ways I felt concerned that she was isolated and not able to come onto the campus. As the restrictions were lifted, we encouraged her to come onto the campus. Thankfully, she quite quickly formed some connections with other students, and it was great to know she had some peers for social support on campus.

**Patricia:** I had students who arrived alone in the US after the COVID 19 lock down. As many students have spent time isolated increasing the frequency of contact has been very important. Also recognising the loss many people have experienced through not being able to achieve milestones and experiences is important. In spite of this I have been inspired and motivated by my student's progress in this challenging time.



In our supervision practice, we have found that it is important to get students writing as soon as possible. This early engagement with writing can assist in identifying any issues with writing early in the candidature. We encourage our students to begin to write from commencement of candidature, and we use this written work as a focus of questioning and discussion at supervision meetings. Through this process, we are also able to ascertain the candidates' grasp of conceptual issues and their ability and confidence to discuss this verbally and in writing.

Issues of power and power difference come into play here as students from most countries will hold the supervisor in a position of ultimate authority and expertise. Hence, they may be reluctant to challenge the supervisor in any way. Students may show considerable deference to supervisors because they may have cultural values that make disagreeing with or challenging supervisors very difficult. In many cases, students may expect the supervisor to make or suggest the changes needed – taking a sort of "can you just do what is needed to make it right" approach. Supervisors need to help students access the available services and continue to provide feedback on the need for writing clarity. We have discussed issues of feedback and feedforward in ▶ Chap. 5, but here it is important to acknowledge that there can also be cultural issues influencing how feedback is experienced.

A study of international student feedback reported that not only did students find receiving feedback highly emotional as in their home culture this is not a norm; the students also relayed concerns about critiquing the work of others as this was not an acceptable way to behave in their home country. For students, this means that feedback may evoke culturally embedded responses to critique that will impact the way they respond to that critique, and further, the student may experience difficulty communicating with the supervisor in an authentic manner (Wang and Li 2011). If this continues, the student may find it difficult to develop the level of sophistication in writing that is required at the doctoral level. It is important that supervisors adopt pedagogical processes that can help students to engage with feedback and support students to critique and write. Students can also consult their peers and available services to improve their written English skills. Most universities offer academic writing support in some form or other, and we have found these supports are very useful in helping students continue to develop their academic writing skills.

Writing can be challenging for some Indigenous students for many reasons including the primacy of oral communication. One reason not often recognised is the fact that the style of academic writing required by universities can challenge the student's sense of self. Students may be confronted with questions such as *Who am I?* and *What does this mean for me?* For Indigenous students, being at university can mean being continually faced with and needing to challenge the deficit approach to Indigenous people portrayed in much of the extant scholarly and scientific literature. This can be overwhelming for some students, particularly early on in their candidature. Finding ways to overcome that deficit lens means students may well require considerable support to challenge and adopt a strengths-based approach to research and writing. We have found that encouraging students to use metaphor, art, and other cultural symbols meaningful to them in their work can help them to mitigate the continuous deficit discourses and assist them in establishing and claiming their cultural authority within their work.

## 7.5 Indigenous Doctoral Students

The term 'Indigenous' refers to First Nations Poples. Indigenous people from countries with a colonial-settler history, such as Australia, New Zealand, the United States, and Canada, are said to experience similar challenges when undertaking doctoral studies (Grant 2010). However, the numbers of Indigenous doctoral students are increasing globally. Universities, however, continue to be privileged spaces dominated by white perspectives where Indigenous knowledge tends to be overlooked or undervalued. It can be difficult for Indigenous students entering academia as a doctoral student as the university culture is built on a system of colonial privilege and for Indigenous students, this can be hard to reconcile with. Indigenous students may need help and time to come to terms with the culture of the university. Supervisors can assist students by providing guidance and support and being prepared to have these sometimes difficult conversations with their students. Many (if not most) universities in Australia, New Zealand, and Canada also provide resources and spaces to help Indigenous students feel

academically and culturally supported, and we also encourage our students to join in, participate, and make use of these spaces.

We do a lot of our supervision work in Australia, and so in our supervision practice, we closely adhere to the AIATSIS Code (2020) that highlights four key principles to guide and inform Aboriginal and Torres Strait Islander research. These are (1) Indigenous self-determination; (2) Indigenous leadership; (3) impact and value; and (4) sustainability and accountability. Detailed information about each of these principles can be found in the AIATSIS Code of Ethics for Aboriginal and Torres Strait Islander Research (2020).

**Student Dialogue Box 7.1 Struggling with Writing**

**Student:** I am struggling with my writing- I cannot seem to get the right lens to use to make sure I don't write about Aboriginal people in a disrespectful way? How can I be more respectful with my writing?

**Supervisor:** Have you talked to the cultural mentor on your panel about this? She might be able to help.

**Student:** Yes, I did but she was not really sure. She said I could think more about the potential impact on our people when I am writing.

**Supervisor:** That is a very important point. Try to focus your writing on the values and traditional knowledge of Indigenous people and work from that position. We can take the work back to community and present to them too to help get their views of the story you are writing. And being back on country, being able to feel the land, hear the sounds and be with the community will hopefully be helpful too.

## 7.6 Choosing a Supervisor

While some Indigenous students prefer to have an Indigenous supervisor, a study by Trudgett (2011) revealed that many Indigenous students were more concerned about the quality of supervision and expertise of the supervisor than the ethnicity or cultural background of the supervisor. They did however tend to prefer an Indigenous supervisor when the topic was related to Indigenous issues and culture (Trudgett 2011). We always recommend students choose a cultural mentor or advisor to join the supervisory panel wherever possible. Cultural mentors have an essential role for Indigenous students, and while each situation is unique, cultural mentors can be very helpful in helping students to develop cultural authority and understand cultural processes. Cultural mentors can also be very helpful when students are engaging with and feeding back to community. Some Indigenous-led departments and organisations offer courses for supervisors from non-Indigenous backgrounds to help enhance understanding Indigenous research practices and how to best support students, and having done this training ourselves, we highly recommend these courses.

We have also found that students will tend to approach supervisors recommended by their peers and colleagues, regardless of issues of cultural background. In addition to having deep familiarity with the AIATSIS Code, (non-Indigenous)

supervisors of Indigenous students must have recognition, understanding of, and empathy for the colonisation experience and recognise the loss of sovereignty that Indigenous peoples experience. The education system, and particularly higher education, while representing the pinnacle of achievement in the Western educational system, for many Indigenous people also symbolises colonisation, assimilation, and dispossession (Anderson and Atkinson 2013). If supervisors consider this as a legacy of the past that has no bearing in today's education system, they are likely to be unsuitable to supervise Indigenous students.

Effective supervisors of Indigenous students are able to adopt an appropriate pedagogy, such as a sovereign rights-based pedagogy, to underpin their supervisor practices (Lea 2004) and be prepared to question their own preconceptions (Grant 2010). Supervisors prepared to embrace these ideas within their own pedagogy are better equipped to work with Indigenous students as they are more likely to be able to appreciate the student's perspective and understand the additional strengths the student brings to the doctoral candidature.

**Conversation Box 7.2 Supervision and Cultural Diversity**

**Debra:** I have been lucky enough to do a course on supervising Indigenous higher degree research that was run by Indigenous scholars and scientists, and this course was really helpful for me to have a better sense of how to best support Indigenous doctoral students and work in ways that are culturally respectful. I participate in ongoing cultural mentorship, and encourage students to participate in the Indigenous life of the university. For international students, our university organises a number of guided events such as taking a train to the beach for lunch and a swim. Through these types of activities, not only do students get to have fun at the beach; they also get to meet other students, and are able to learn the local mores around using public transport to get around the city.

**Kim:** In addition to developing a close relationship with the students, I always allow a lot of time to be part of the community engagement that is a necessary part of working with local communities. I believe I need to be familiar with the context of the student's study and must get to know the community they work with as much as is possible. I always encourage Aboriginal and Torres Strait Islander students to use decolonising approaches to their studies, support them to adopt Indigenous research approaches, and encourage them to utilise varied ways of presenting their data-this can be art-based, poetry, stories and so on. Like Debra, I also encourage the students to participate in the wider university Indigenous community and draw on the cultural supports available through the university.

**Patricia:** Respect and consideration of Indigenous sovereignty are critical in establishing mutually respectful relationships. Creating environments of cultural safety and respect for Indigenous methods are critical. Fostering networks and promotion of strengths based approaches are also really critical. It's also important to draw on the cultural supports provided by the wider university community.

## 7.7 Community Research and Engagement

It is important to recognise and acknowledge that Indigenous students often have to negotiate additional structures, organisations, and obligations to do their research and that these take time. For a start, there are cultural requirements and obligations to community. Students generally require cultural approvals for the planned project and usually will be taking the work back to community at various stages. In addition to community processes, there are also requirements around ethics and research processes and procedures when working with Indigenous communities, and it is important to realise these cultural obligations and requirements are crucial to the work and that adequate time is allowed to attend to these.

Engagement with community generally takes place over the entire candidature – it is not the case that students can go into community, take the data they need, and leave. The engagement must continue. The time required for the engagement with community is extensive and must be recognised by the supervisor and student and included in timeline development. Unfortunately, the time for community engagement is rarely recognised by university processes. Students also have additional obligations to ensure they conduct their research in ways that is respectful of their community. This may include the need to meet with Elders and discuss their research at the commencement of their project and also that they remain engaged with the community at all stages of the research journey. We encourage students to meet with community often and to provide feedback on their findings at all stages of their study. This includes community engagement and input in processes such as methods and methodology, recruitment, and reporting.

Close engagement with community also means the students will likely come under close scrutiny from their own family and other members of their own community. This can be difficult for students. The obligations placed on students conducting research in their own or other local communities mean they can sometimes feel overloaded with the expectations placed upon them. Supervisors need to be aware of these issues and be available to support the student and assist them should any issues arise.

**Student Dialogue Box 7.2 Cultural Balance on Supervision Teams**

**Student 1:** I don't have an Indigenous person on my supervisory panel. This is becoming hard for me as I feel like I am teaching the supervisors about my culture.

**Student 2:** It's the same for me except I feel like my supervisors don't respect the needs of community engagement and work with community.

**Student 3:** Well, I think you need to ask them to add a cultural mentor or advisor to the team. That might help to reduce the stress for you to be doing this work.

**Thought Box 7.1 Suggestions for Supervisors of Students from Different Cultural Backgrounds**

There are a number of steps supervisors can take to enhance their skills and gain the knowledge that can help with cross-cultural supervision:

- Undertake cultural awareness training.
- Develop awareness of Indigenous research approaches.
- Take time to get to know your student – where they come from, their family and family obligations, and their community, education background, and learning style.
- Get to know the community where Indigenous students will do their research – becoming known to that community will be important to the success of your student.
- Be sure you have the time to commit to the students and their research.
- Provide clear expectations and goals.
- Encourage independence but provide support where needed.
- Model professional behaviours.
- Include students in social events where appropriate.

**Thought Box 7.2 Suggestions for Students from Diverse Cultural Backgrounds**

There are a number of steps students can take to enhance their skills and gain the knowledge that can help with undertaking doctoral studies in a cross-cultural context:

- Read and research potential supervisors prior to enrolment.
- Participate in student orientation and other relevant student activities.
- Communicate openly with your supervisor(s).
- Be prepared to become a more independent scholar as your study progresses.
- Read beyond your own research question/topic.
- Be prepared to tell your supervisor(s) when you are experiencing difficulties and do this as soon as they occur.
- Make the most of the services available at the university and participate in sessions/courses targeted at doctoral students.

**Reflective Activities**

1. Reflect on your own self-identity.
2. How do you identify?
3. Reflect on and acknowledge your own privilege.
4. What are the values that drive you as a person?
5. Does your identity reflect the "norm" in your culture and community?
6. Do you think people look at you in particular ways or have particular predetermined expectations about you because of how you identify?
7. What assumptions do you hold about people who identify differently to you or who have values different to your own?
8. Where can you derive identity, strength, and cultural support?

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# Developing Doctoral Writing

## Contents




D. Jackson et al., *Successful Doctoral Training in Nursing and Health Sciences*, https://doi.org/10.1007/978-3-030-87946-4_8

### Student Reflections

*"My supervisors were generous with their time, guidance, knowledge, and even materials that they came across, which appeared helpful for my study. They encouraged me to write daily towards improving my skills and documenting my ideas around the project. My supervisors exposed me to sources of support by encouraging me to regularly attend Faculty and Graduate School programs that could aid my research journey. My supervisors often responded to my drafts/work within a stipulated time".*

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*"I can't even attempt to quantify the hours I put into writing, rewriting and writing again. My supervisors put a huge effort into helping me and my student peers develop as writers. We would go away for a few days a few times a year to work on writing. Nowhere fancy but the thing was it was a total immersion experience. There would be about 20 of us students and 4-5 mentors, and we would work alone and in pairs and groups. We would get two lots of formal feedback every day and also informal conversations as often as we needed them. We learned to write in a lot of different genres – I found out that writing a literature review is a different thing to writing a research paper and different again to writing a findings chapter. But what a wonderful period. It generated momentum. I learnt so much and know how lucky I was to have the supervision I had. I had friends also doing PhDs who didn't get the support and developmental opportunities I got".*

***

*"I found it hard to write my findings. They were very complex and it was so difficult to write with the necessary clarity. After I did a couple of versions that were not very good, my supervisors talked to me about me needing to find my own voice. So they advised me to take a couple of months off the writing and set me 10 questions and asked me to contemplate these questions in relation to my work. I tackled 2 or 3 of the questions each week and had weekly conversations with the supervision team. After a few weeks of that my writing was so much stronger and I was much better able to convey these complex ideas with more clarity and confidence".*



### Upon Reading this Chapter and with Further Reflection, Readers Will Be Able to

1. Describe the importance of writing in successful doctoral work
2. Discuss the role of supervisors in supporting the development of student writing skills
3. Identify and respond to some common writing problems faced by students
4. Explain the role of supervisors in relation to editing
5. Articulate strategies that can enhance student writing

## 8.1 The Importance of the Writing Task

Writing is central to doctoral studies and is what composes the product to be examined – that is, the thesis. In most parts of the world and with very few exceptions, the awarding of a doctoral degree is dependent on the examination of a written and stand-alone thesis document. Examiners are generally provided with a written

thesis, instructions for the examination, and little else. Thus, the submitted document must be complete and written in such a way as to wholly meet the requirements of the degree. Because of the reliance on the written document, writing is a crucial area of development for students.

A major role of supervisors is to ensure the provision of effective advice, guidance, and feedback on the writing of the thesis. The importance of writing to doctoral studies means that it is an issue to be discussed at supervision meetings. It is very important that supervisors clarify their role in relation to writing with students, and this is done in the early stages of the candidature. It is important that students are very clear on the role of supervisors and this does not involve line-by-line editing the work of students. What supervisors will do is to help the student to develop the skills and abilities to critically assess their work and learn to self-edit and revise. These are crucial skills for successful doctoral completion and skills that will best prepare the student for their post-doctoral careers.

**Conversation Box 8.1 Focussing on the Writing Task**

**Debra:** I encourage my students to begin writing from the very beginning of their candidature. I ask the students to develop a timeline and thesis plan for the overall thesis, as well as a detailed plan for each semester. In each semester I like the students to have a plan for writing. In the earliest semesters writing activities can focus on developing the proposal for the stage one defence procedures, as well as beginning the literature review and then after that, the ethics documents. As the student moves through the candidature, the writing activities can be broadened to include abstracts, papers, and thesis chapters as well as other writing activities.

**Kim:** The plan to write often is important as new students are often reluctant to share their writing but encouraging these smaller writing tasks helps overcome that issue. This is also an integral time for students to receive feedback on their early writing drafts. It is possible that as supervisors we need to be open to accept alternative forms of writing rather than only the traditional thesis. By this I mean forms of writing such as poetry, creative writing such as stories and plays and self-reflective pieces, are now more commonly a component of a modern thesis. This is particularly appropriate for students from different cultural backgrounds where such expression is more in keeping with their culture.

**Patricia:** Writing and communicating is so fundamentally important that I start the student writing a manuscript on day one. Often this is the literature review- I use a template which students find useful. It can also help breaking down a daunting project into manageable parts. Like any skill, writing gets better over time with practice, critique and refinement.

Novice supervisors may assume that students entering a doctoral program may already be highly skilled and accomplished writers and that it is not their role to teach students to write. It is true that many commencing students may already have publications in the scholarly literature, as well as previously completing academic work such as academic assignments and theses at the Masters or Honours level. However, coming to doctoral studies requires writing that is different from the previous writing candidates may have done. For a start, the length and depth required for doctoral work may be quite unlike anything the candidate has written previously. In addition is the requirement of originality or new knowledge. For these reasons, even students who are skilled writers on commencement will need to have guidance and support around the writing task.

Developing the skills to write critically, a requirement of doctoral students, can be challenging. It can also be challenging for supervisors to assist students who struggle to synthesise, conceptualise, and structure their writing at the required level. For example, a common critique of students' work early on in candidature is that the work is not critical. Unfortunately, many students struggle to understand just what that term means, and it may be appropriate for supervisors to advise students to question their work, and pose questions themselves, which may assist students to build their confidence and their understanding and awareness of criticality (Lee and Murray 2015). This is where encouraging membership of scholarly writing groups as well as other groups such as journal clubs can be effective in assisting students to develop the critical awareness and depth of writing required at the doctoral level. Developing skills of self-critique and editing is critically important.



## 8.2 Writing Throughout Candidature

As we have indicated in previous chapters of this book, the writing task can be among the most challenging aspects of candidature for students. Students can find writing to be stress provoking and difficult, and some students will actively avoid the writing task, instead busying themselves with other activities. There are various approaches to writing in candidature, with some students delaying writing and putting off the writing of the thesis until data collection and other phases of the work are completed. This is because some people view the doctoral degree as having two distinct stages – that is, the *doing* work – doing the research including collecting and analysing the data, and then writing the thesis.

However, we have learned through our own supervision that students are better to be actively engaged in writing from the very beginning of the candidature, rather than leaving the writing to the end. We hold the strong view that writing is part of the learning associated with doctoral studies. Through the process of writing, reflecting, critiquing, and writing again, students are able to articulate and refine their developing ideas. With every iteration, the work improves as the ideas and substance are distilled and refined to reach the standards of scholarly sophistication and originality that are essential in doctoral work. It is very difficult to reach this standard if the writing is thrown together at the last moment. There is nothing worse than a student having only a semester or two remaining and having to write an entire thesis involving around 80–100,000 words in that very short time.

It can be useful to help students develop specific writing goals for each semester of study – these should be achievable, and all activities should contribute to the work of the doctoral thesis. We find it helpful for students to have clear writing objectives and then to identify activities that will help them to achieve these desired objectives. Supervisors can be enormously helpful in working with students to develop these objectives and aims and identify the activities needed to address each one. At the end of each semester, it is useful to revisit the goals and reflect on whether they have been achieved or not and if not why not. This is a point at which the students and supervisors can together decide if additional support is needed and, if so, what form(s) this additional support could take. At this point too, students can work with supervisors to develop and refine goals for the following semester.

When choosing writing activities for very early in candidature, it is important to ensure that these are achievable and recognise the status of the student as a new student. It can be useful to encourage writing tasks such as producing a detailed proposal of the work, developing a protocol for the literature search, doing an annotated bibliography of relevant literature to summarise the aims and outcomes of previous research in the field, and creating visuals such as a concept map. Helping students to set goals about writing, reading their work, and talking with students about the experience of addressing the writing task can help supervisors and students ascertain the strengths and weaknesses of their writing, their comfort with writing in the appropriate genre, how they articulate ideas, academic literacy, their abilities to paraphrase and summarise, and their abilities to critique (rather than simply describe). All of these will help the team to identify specific writing challenges students may be facing and assist in developing a targeted plan to help with focussed skill development.

It is important that the supervisory team and the students are open about writing and that the student shares writing regularly. Many tensions can arise around writing and, if not taken into account by the team, can be the source of delay for the student. One issue we have mentioned earlier in this text that impacts some students is the "imposter syndrome" where students experience self-doubt about their research and ability to express it to others (Wilson and Cutri 2019). The issue of "finding a voice" related to the research study can be a problem for many students. These issues can be overcome with time and effective collaboration with students, drawing on strategies such as encouraging students to read widely and then to write annotations on what they are reading, discussion and debate with supervisors, regularly writing and presenting their work, and participation in scholarly writing groups and other peer-related activities.

## 8.3 Strategies to Help Students Write

We have developed and incorporate a range of pedagogical approaches to assist students to write more effectively during their period of candidature. Some of these have already been outlined in earlier chapters of this book. These techniques include, but are not limited to, writing retreats, scholarly writing groups, online writing groups, and writing dyads with other students. While these peer-focussed strategies

are not intended to take away from the significant role of the supervisor in the development of academic writing and publishing skills, from a pedagogical principle, the peer review that occurs in these writing strategies helps students to work with their peers and more experienced writers to enhance the quality of their academic writing and to sustain motivation to write (Lee and Kamler 2008). Previous studies of these types of peer-focussed writing strategies have indicated that giving and receiving feedback assisted students to better understand the requirements of academic writing, enhanced self-confidence as a writer, and facilitated close and nurturing connections with the other members of the group (Cafarella and Barnett 2000). A further study reported the building of individual expertise related to writing, increased confidence with knowledge, fostered positive identity shifts, expanded networks of learning, and an enhanced sense of self-belonging (Kumar and Aitchison 2018). Furthermore, as these strategies create a culture of ongoing feedback and role model how to respond to feedback, they can also lead to a culture where critique or feedback becomes de-stigmatised which reduces the anxiety that can arise with writing at this level (Cafarella and Barnett 2000). For some students, such as students from diverse cultural groups, for example, writing strategies that provide open feedback can be anxiety provoking. Supervisors need to remain aware of this potential issue and ensure the forums are culturally safe and appropriate for all participants.



## 8.4 Publishing Through Candidature

There are different views on this, and indeed, some universities have rules about publication of student work during candidature. We believe there are many advantages to students publishing and presenting their work as they progress through their candidature. Submission of work for publication and presentation provides opportunities for students to get additional and focussed feedback on their work from anonymous peer reviewers. Each element of the work that is submitted for publication is subjected to close critique and analysis, beyond the supervision team, and students are the real winners and beneficiaries of this additional critique and analysis. Not only do they get the benefit of this high-level external critique; they are then able to be supported to address and respond to the feedback, which is an invaluable skill for students. In addition, having to address feedback from external reviewers is extremely valuable as it also assists the students to improve their writing and to revise their work in order to connect more readily with an external audience.

Preparing publications from a PhD thesis requires development as there is a need to move the writing beyond that of a traditional thesis chapter at the institutional level to writing that suits a particular journal, genre, and (usually international) audience. Our past experience has shown that students do not always make this move easily and may well need guidance from supervisors to do so. Through publishing their work in the peer-reviewed literature, students learn to develop and articulate logical, well-structured arguments, produce work that flows logically, incorporate the literature into their work, reference appropriately, correctly attribute ideas, remain within a word limit, and a host of other important skills. The nature of doctoral candidature can also mean that students can go quite con-

siderable periods of time feeling they are not really moving and with little to celebrate. Over time, this can affect student morale and motivation. We have found that publications and other dissemination activities can really help students to remain motivated and positive about their work and help them to have a sense that they are progressing in their work. Furthermore, if a student already has a range of publications from their work on award of their doctoral degree, they are better placed and more competitive when applying for post-doctoral opportunities. As supervisors and examiners, we know that examination processes are often smoother when considerable chunks of the work have been subject to previous rigorous external peer review, as happens with submission to legitimate peer-reviewed journals.

## 8.5 Authorship

Decisions about authorship of PhD student scholarly outputs are an important discussion for the team and, as such, should be discussed early. Outputs from a PhD usually include the student and the supervisors if all have contributed to the study and the writing of the paper. In most cases, the student will be the first author. Positioning of the other co-authors is however less clear and varies across disciplines. Authorship of research outputs is an ethical and integrity issue that is guided by a number of policies and practices such as the Council on Publication Ethics (COPE) Guidelines. The International Committee of Medical Journal Editors (ICJME) also has widely accepted guidance on authorship. They recommend named authors meet the following criteria:

1. Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
2. Drafting the work or revising it critically for important intellectual content; AND
3. Final approval of the version to be published; AND
4. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. (ICJME ► http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html)

Given these requirements, it is essential to discuss issues of authorship early. Students are often unclear about what constitutes co-authorship and will need guidance from the supervisory team. What is evident is that problems can arise with regard to authorship if this aspect of doctoral writing is not openly discussed by the team. Unfortunately, the issue of co-authorship can and has led to many instances of conflict and can lead to irreparable division between the student and supervisor(s). Plagiarism can be a significant issue for co-authorship. In the case of doctoral student's writing for publication, it is important that all team members are actively involved in the writing process and remain that way at all stages of production of the paper as the responsibility for the integrity of each paper submitted for publication rests with all authors equally. For more on authorship, see ► Chap. 3.

## 8.6 Predatory Publications

It is important at this stage to acknowledge predatory publications and conferences. Students are very vulnerable to being targeted by predatory publishers (Ross 2021). These unscrupulous organisations produce publications that masquerade as legitimate scientific journals. They have weak or bogus peer review processes, generally charge fees, and only tend to last for a few months, after which they and all the work they have published suddenly disappear. Furthermore, because of their fraudulent nature, the material published in these journals does not come up in library searches, meaning that the papers do not tend to get cited, which means with work does not meaningfully contribute to science (as people cannot find it to read) and authors contributing to these journals miss out on important impact measures (such as citations). These journals can seem legitimate to naive new scholars, because they tend to imitate established journals in titles and appearance. Sometimes they list respected and well-known researchers on their (often fake) editorial boards without the knowledge or consent of these established scholars. It is important that supervisors ensure students are able to correctly identify legitimate journals and do not send their work to fraudulent publications. Most university libraries have a stock of information about predatory journals and are able to provide students with the provenance, origin, and standing of any journal. We advise students seeking to publish consult their university librarians before making any decisions about where to submit their work.



**Conversation Box 8.2 Pedagogy to Support Writing and Critique**

**Debra:** Developing writing skills is integral to doctoral studies, and so for me, providing opportunities to develop as a writer underpins pedagogy for doctoral students. There are lots of ways this can be achieved and we have covered some of these already in this book. Many writing activities can be organised through group processes. In addition to actual writing activities, encouraging students to participate in peer review activities can help them to develop the skills in critique and feedback that will benefit them in self-correcting their own work but also help them develop the skills needed for their own subsequent supervision activities.

**Kim:** These joint writing activities are very important to enable student writing and critique. Students have to come to the realisation that writing for a PhD is not just an aside to the study, but rather, a key aspect of the process. Scholarly writing groups and similar activities offer students the opportunity to develop writing skills and receive feedback from the peers, which helps to reduce reliance on the supervisory team. Being part of a scholarly writing group assist students to not only develop their writing skills, but also aid their development as a scholar, and reduce the sense of isolation of experienced by many PhD students.

**Patricia:** I agree engaging in writing groups, and embedding writing as part of the academic journey is critically important. I sometimes say to students *enough reading just write*. Developing the confidence to have an authoritative voice is critical in scholarly development.

## 8.7 Common Writing Problems

Each student is different and brings their own unique set of strengths to doctoral studies. However, no matter how skilled, most students will experience a range of challenges associated with writing for doctoral studies to which supervisors need to be able to recognise and respond (see Table 8.1). It is crucial that difficulties with writing are recognised and addressed as soon as possible.

**Table 8.1** Writing challenges and possible responses

| Challenge | Possible responses |
|---|---|
| Difficulty getting started | Develop achievable writing goals for each week, such as producing a more detailed proposal of the planned work, developing a protocol for the literature search, doing an annotated bibliography of relevant literature to summarise the aims and outcomes of previous research in the field, and creating visuals such as a concept map |
| Writing lacks clarity | Use of questioning to highlight areas of ambiguity |
| Work not flowing logically | Use of questioning to highlight areas of ambiguity that if addressed, would improve flow and sequencing |
| Work too descriptive | Encourage students to question the text |
| Grammar and syntax issues | Use of computer software to highlight issues<br>Focussing on small areas to identify and work through issues<br>Encourage the student to read their work aloud<br>Refer to learning support services as needed |
| Writer's block | Encourage students to "speak" their work and then write down what they are saying. This will give them a starting point to begin the document |
| Lack of confidence | Remind students that writing occurs in several stages and begins with drafting the work and then involves processes such as editing, proofing, and revising and that all these stages enhance the work<br>Having discussions that can help the student to find their own voice can also help build confidence |
| Not writing to the depth required | Use of questioning to highlight areas of ambiguity<br>Recommend theses for students to access and read |

As we have mentioned earlier in this book, it is not appropriate for supervisors to provide continued line-by-line feedback on writing. A doctoral graduate should be well able to critique their own work and identify areas where improvements are needed. There are various strategies that supervisors can use to develop these skills including closely editing a section of the work (say 300–500 words) and then asking the student to reflect on the edited work. It can be useful to go through that one section of the work line-by-line to ascertain the student's understandings of the need for editing and the issues that were addressed. Following this, students can be asked to do same exercise with the next 500 words and to then go through that section with the supervision team. Another great strategy is reading the work aloud. Reading aloud can be an enormous help in picking up issues such as tensing, grammar, and sentences that are too long or don't make sense or where ideas do not link well. For more information about student feedback and development, see ► Chaps. 5 and 6.

**Reflective Exercise 8.1**

Rhama has previously provided detailed written feedback on three chapters of the student's thesis. She noted that that the document contained many poorly written sentences and grammatical issues such as inconsistencies with tenses, moving from singular to plural in sentences and vice versa. Rhama also noted and commented upon assertions unsupported by evidence and information uncritically accepted as fact. The student has addressed the feedback and now has resubmitted the three chapters. On reading the work, Rhama notices that many issues she identified previously have not been addressed.

- Have you had this experience as a supervisor or student? If so, how did it make you feel?
- What could be the reason that this work has been returned to Rhama with previously highlighted issues unaddressed?
- How do you think Rhama could respond here?
- What are some strategies Rhama could suggest that could help the student to better monitor their work?

## 8.8 Writer's Block

Writer's block is also a common issue that can challenge doctoral students. However, most doctoral students are time poor, and writer's block is a luxury most students cannot afford. It is important that supervisors can recognise signs of writer's block so as to help students develop strategies to overcome this problem. Writer's block can be associated with a number of factors including procrastination, not knowing what to write, not knowing how to get started with the writing, not being in the best physical location to write, not having the necessary materials and resources available, or previous negative writing experiences. Sometimes it can be as simple as talking to students about where they are writing. Sometimes students are trying to write in shared cramped households where they have issues with their writing that are caused by housemates socialising or shared unreliable

Internet. These sorts of irritations can affect concentration and focus to a point that the student gets blocked with their writing. In these cases, just talking through some alternatives such as coming onto campus and using local libraries and even coffee shops can be very helpful. We have found that writer's block can be mitigated with various strategies including asking the student to verbally state what they are wanting to write and to then put those words on paper. This will provide the student with a beginning document they can work up.

Other useful strategies include lowering the bar for a short period and asking for shorter, more focussed pieces of writing and setting contained weekly goals that are focussed and achievable. These can include tasks such as finding 3–4 articles on their topic and providing a short (say 200 word) summary of each highlighting its link to their study questions. Depending on the nature of writing required, it can be useful to ask students to do an outline or skeleton of the document to be produced, using just headings and bullet points, and then working towards populating the document with prose, section by section.

Students can also be encouraged to write through various strategies such as free writing, which involves setting the student a prompt question or statement and asking the students to sit and write without stopping for a period of 10 min. This type of activity can help unblock writer's block. Visualisations are another technique that can be used to assist writers to progress. These can include concept maps, storyboards, drawings, models, diagrams, and figures, all of which assist the student to use a visualisation to assist them to "kickstart" their thinking and writing.

It can also help to break up the day into various activities so that students are not sitting at the computer all the time and unable to progress their work. Sometimes a total shift in focus is needed when students are feeling stuck. We have found there are periods of the day that some students find more difficult to focus and write – for some students, it is the early afternoon (after lunch) period. It can be useful to get students doing something else, something a bit more interactive at these times, such as encouraging participation in student activities or organising an early afternoon student seminars so students can discuss their work together. In these ways, the time can be used productively, and students are not just sitting at the computer and unable to work effectively. Often when they return to the writing task after these types of activities, students have a renewed energy and new ideas.

Activities such as these should continue whenever the student needs them and until the student is able to approach the writing task with more confidence and focus. Over time and with practice using these various strategies, we have found writer's block seems to diminish and students become better able to manage it themselves and intervene to interrupt the block before it becomes problematic.

**Reflective Exercises**

1. Have you ever experienced writer's block? Reflect on the factors that contributed to the situation.
2. How did you free yourself from writer's block?
3. What advice would you give to a colleague or friend experiencing writer's block? Try to think of three strategies.

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# Preparing for Examination

## Contents




D. Jackson et al., *Successful Doctoral Training in Nursing and Health Sciences*, https://doi.org/10.1007/978-3-030-87946-4_9

### Student Reflections

*"Like most students I worked very hard on my thesis, and was reasonably confident about the quality of my work. I had put most of it out to peer review before examination and my supervisors had very high standards and they said it was good. And I did believe in my own work. But I found even thinking about the viva gave me actual physical symptoms almost like a mild panic attack. It was irrational but I couldn't shake it. So I ended up telling my supervisors because I hoped to be able to avoid it. But they sent me off to the student support services and I was able to get strategies that helped me to get through it. In the end though the viva was OK and I got through it well."*

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*"One of the hardest things for me was the oral viva. It lasted for three hours and there were a lot of questions about the conclusions I had reached and also my recommendations. But I was able to defend my work and I passed the examination with only some changes to the discussion chapter required. I think the experiences I had with my mock viva helped me to stay in the moment and focus on the question being asked. To stay on task".*

***

*"When I got my examiners reports I got overcome with emotion and cried. The reports were so validating and supportive and reading them, I could see all three examiners really got what I had tried to do. My supervisors had always been very supportive and encouraging which I always appreciated but to get that validation from three scholars I didn't know, who hadn't seen my work previously was overwhelming. One of the best things was that one of the international examiners who was a true leader in the field commented on the quality of my writing and said it was the among the best theses he had ever examined. I'll never forget that day and reading those reports".*



### Upon Reading this Chapter and with Further Reflection, Readers Will Be Able to

1. Describe the process of preparing the thesis and planning submission for examination
2. Outline the process for selecting examiners
3. Understand the importance of selecting examiners who are experienced and relevant to the topic and/or methodology
4. Identify the potential outcomes of the examination process

## 9.1 Planning for Submission

Ideally, preparation for submission should be planned for at least 3–6 months prior to the expected date of submission. During this time, the student needs to ensure all chapters are complete, all required processes followed, and all attachments included. In our experience, this can become a time of great anxiety so planning is important. In addition, the development of a day-to-day plan and to-do list is a good way to keep on track and avoid delays. At this stage of the journey, students

must ensure they are aware of the university processes and requirements. Each university will have different forms and requirements, and it is important that the team (supervisors and students) are aware of these prior to preparing for submission. Mostly, these will be available on the university website or through the Graduate Research School (or equivalent). This is also a good time to make a time to meet with the administrative personnel responsible for managing thesis examination as they may have other requirements to be aware of and helpful information to share.

It is important to factor in quite a significant amount of time for this final stage – many students underestimate the time this final process takes and end up rushing at the end, becoming quite stressed in the process. To avoid this issue, it is best to plan well ahead, do as much as possible to draw chapters together along the way, ensure materials required for the appendices are filed in a separate file over the duration of the project, and set goals and outcomes for each week of the final time period. In preparing for submission, it is also useful to look at some doctoral theses that have been successfully examined, to get a sense of the standard and style of presentation required.

This final phase of the thesis preparation can be an emotional one for many students. They often have doubts about the quality of their work, become overinvolved in the study and the need to finalise all components, and often fail to allow time for living; some become so overwhelmed and so stressed it impacts their ability to do the required final pieces of work. The best way to avoid these issues is to be well prepared and plan for sufficient time to complete all requirements efficiently and effectively.

## 9.2 Supervisor(s) Initial Review of the Final Thesis

It is usual practice for supervisors to review the final thesis prior to submission for examination. Even though supervisors have usually read and commented on chapter drafts on numerous occasions during the years of the candidature, it is important to read the thesis from one end to the other (in the way an examiner will) prior to submission for examination. This is an important opportunity to ensure the thesis meets the requirements set out by the university. Ensuring the thesis is methodologically and conceptually congruent is critically important. Most universities expect a thesis of approximately 80–100,000 words for a PhD (usually around 50–60,000 for a master's thesis), depending on the discipline, so this critical read will take a fair chunk of time. The thesis needs to not only outline all aspects of the completed project but also clearly identify the original contribution to knowledge arising from the work, supporting the idea that the student has become an authority on the topic (Joyner et al., 2018). At this stage, the supervisors will also be ensuring the thesis is internally coherent, lacks repetition, tells the story of the project from beginning to end, includes sufficient theory, clearly articulates the new knowledge produced by this work, and includes all mandatory acknowledgements and documentation (such as those required for embedded publications).

## 9.3 Types of Theses

There are various types of theses, and each will have requirements and considerations for submission. The first, or what is usually referred to a traditional thesis, is made up of a number of chapters that follow the format of a usual research report. That is, it comprises a number of chapters such as an introduction, literature review, methodology and methods (this can be one or two chapters), the findings chapter(s), a discussion chapter, and a concluding chapter. These chapters are then followed by the references and by a number of appendices that generally include ethics clearances, ethics information and consent forms, plus other forms that are included in consultation with the team.

More recently, the thesis *by* or *with* publication has become popular in many countries. In that format, the thesis is a collection of published, in press, or under review papers that have resulted from the study described in the thesis. In the case of most universities, this thesis type requires more than just merely packaging the papers together. Rather, it involves the development of a thesis that has published (or otherwise) manuscripts or papers inserted in lieu of some chapters (Sharmini et al. 2015). In a thesis by publication, it is important to ensure the introduction sets the scene for the study and outlines where publications have been inserted throughout the thesis. This is often best done by the inclusion of a table that shows the examiner how everything fits together. The thesis by publication will also end with a discussion/conclusion chapter that will provide the examiner with an overview of the thesis, an outline of the contribution to new knowledge, and recommendations for further research. Thesis by publication has become more common and acceptable in recent years as the pressure to publish has grown for academics (Mason 2018). This approach to the thesis does have many advantages for the student who is supported to publish with and by their supervisors and ends up with a track record of publications which positions them well for postgraduate opportunities and awards (Mason 2018). The student is also the beneficiary of feedback generated through the peer review process.



However, issues such as the quality of the journals in which the work is published are of increasing concern here. In 2021, Ross reported on a situation where an examiner noted that publications submitted for a PhD were in fact published in questionable journals, commenting that:

> » the episode reflects broader concerns that PhDs by publication encourage low-quality and repetitive science and are bedevilled by self-plagiarism and copyright problems, amid widespread anxiety about the proliferation of predatory publishers and conference organisers. (Ross 2021)

It is important that supervisors of these degrees are cognisant of the pitfalls that can befall students (for more on predatory publication, see ► Chap. 8).

Some universities allow hybrid submissions, which is a mix between published and unpublished work. More recently, we have seen the development of clinical or professional doctorates, which normally comprise some elements of coursework,

industry partnership, and submitted work that can include a range of work including portfolios and capstone projects or dissertations.

The arts disciplines have creative theses that are sometimes taken up by students enrolled in health. In that case, the study usually involves two components: a performance or exhibition (such an art display, book of poetry, story work, play, film, and video) and an exegesis (a reflection on the exhibition or presentation and its outcomes and an overview that situates the exhibition and outcomes within the relevant literature, debate, or idea). Given the two components of the study presented for examination, the exegesis is usually reduced to approximately 50–60,000 words. In these situations, the examiners need to be selected very carefully as they need to be able to examine both the exegesis and the exhibition/performance.

**Conversation Box 9.1 Paper Rejected by Journal**

**Student:** I just got my submission back from the last journal with a reject. What should I do? I sent you a copy of the email.

**Supervisor:** Have you read through the comments carefully and decided how they can be addressed?

**Student:** No, I thought it was rejected so I should not do anything further as I am almost ready to submit my thesis for examination.

**Supervisor:** You should take this very useful feedback and use it to improve your paper. We can then discuss where we might submit it next.

**Student:** So, I need to go through and make all the changes. That will mean I will have to change the format for another journal and will mess up my thesis presentation.

**Supervisor:** Yes, that is the case. That is sometimes referred to as one of the pitfalls of doing a thesis by publication.

## 9.4 Preparing for the Oral Defence

Many countries have an oral defence or viva as one of the final requirements of the PhD. If your university does have one, it may be held prior to the thesis being sent out for examination or after it has been returned (the latter is usually the case). The purpose of these examinations is to ensure the work is the students' own, with questions designed to determine the student's ability to defend their work, and to allow students to clarify or elaborate aspects of their work. It is possible that students may pass the written thesis examination but fail their defence as they are unable to competently defend their work; the reverse case is also possible. Supervisors have an important role to play in ensuring not only that the written thesis is well prepared but that the student has had sufficient opportunities to defend their work during the PhD process.

Prior to undertaking the defence, it is crucial for students to thoroughly review the thesis and revisit the methods, results and analyses, and their conclusions to ensure readiness for this oral examination. Having published papers arising from their doctoral work can also be helpful for reducing anxiety about the oral examination.

It is also important to prepare emotionally for this examination as it can be a very stressful and anxiety-provoking event for students. We encourage students who do feel stressed at the thought of this to explore self-calming practices such as deep breathing, and also some students can benefit from avoiding stimulants such as coffee in the hours leading up to the examination. We have also found it useful to prepare students for this examination by providing them with opportunities to take spontaneous, unprompted questions from the floor at student and research community events. Another useful strategy is having mock vivas and asking students to video these, so they can review them later and start to see how they respond to questions. This can be a particularly useful strategy for students who experience anxiety that can cause them to respond off topic, or provide copious amounts of irrelevant information, rather than succinctly answering the question.

**Reflective Exercise 9.1**

At the student meeting, Christine raised the subject of examiners and asked Rhama and Brad and the student to think about people that the team could nominate to examine the thesis. The team were required to submit five names to the university, along with a paragraph justifying the nomination of each person, a statement about conflict of interest with each person, and a brief CV for each person. From that list, the university committee would select three examiners.

1. What factors should Rhama and Brad consider when nominating examiners?
2. What are the sorts of issues that could be considered as being a conflict of interest in examination?
3. What sort of issues might make a person unsuitable to examine a particular thesis?



## 9.5 Selecting Examiners

Examiners play an important role in PhD examination, and selecting examiners is a crucial supervisor activity. Usually, we select for a number of reasons:

1. For the topic of the study
2. For the chosen methodology
3. Experience with PhD examination and supervision

In the case of a PhD, it is usual practice to have two or three examiners, one of whom may be an international examiner. Some universities require that these examiners should not have worked closely with the student or the supervisors during the past 5 years and should not have been involved in or consulted with regard

to the thesis. If the thesis is a thesis by publication, it is important to point that out to the potential examiners at the time of invitation as there are still examiners who do not agree with this format of a PhD thesis. If that is the case, they will likely not be a suitable examiner.

Having at least one examiner who is familiar with the topic area of the study is important, but perhaps of more importance is the selection of one or more who understand the methodology/methods used in the research. If the examiner is unaware of the methodology/methods or has a bias against the approach, that may have implications for the outcome. In regard to selecting an experienced examiner, we take this very seriously as evidence indicates that inexperienced examiners are in fact much tougher on a candidate's work than more experienced examiners (Kiley and Mullins 2004). Unfortunately, this means that inexperienced examiners are often overlooked. However, we believe that as long as there is a combination of experienced and inexperienced examiners, then the process should be fair for the student. If we only ever use experienced examiners, the inexperienced would never get the opportunity to become experienced.

Supervisors and students should come together and identify suitable examiners (if university rules permit). To support this, we recommend selecting examiners as a team approach. Potential examiners should then be researched to determine their area of methodological/methods expertise and their previous experience as supervisors and PhD examiners and recommend use of a template so that team members can gather all the information needed to help the team make the decision about nominations (see ▶ Template 9.1 – Potential examiner's template). It is very important to consider issues of conflict of interest (real or the appearance of) and prior or existing relationships in these deliberations. Once all relevant information is gathered and discussions are held, the group should compile a list of five to six potential examiners. After that stage, the student is usually no longer involved in the decision. The supervisory team will decide on the final three or four, contact them to determine their availability for the task, and then put forward through the university process.

**Reflective Exercise 9.2**

In addition to submitting the thesis for examination, the student also has to satisfactorily complete an oral examination. The student has disclosed to the supervision team that she suffers from anxiety and while she feeling relatively confident about her written work, every time she thinks about the oral examination she feels panicked and overwhelmed and is even waking up at night feeling apprehensive and panicked. She has spoken to her doctor about this, and the doctor advised it is normal to feel anxious about these things and reminded the student of her relaxation strategies as well as suggested some cognitive behavioural therapy to help through this period.

1. How could the supervision team respond to the student here?
2. What are some strategies that could help the student prepare for the oral examination?

## 9.6 What Examiners Expect

Examiners generally want to pass a thesis. Examiners are acutely aware of the effort that goes into the completion of a PhD thesis and the amount of input required of supervisors, so they set out on the task of examining with enthusiasm and wanting to pass the thesis (Kiley and Mullins 2004). In general, examiners tend to have common practices, are looking for the same core qualities, and are fairly consistent across disciplines, nationality, and level of education (Holbrook et al. 2008, 2012). That has certainly been our experience from the high number of examinations we have overseen to date as supervisors and examiners. However, as frequent examiners ourselves, we know that examiners can become quickly annoyed. In fact, there is evidence that examiners make a determination about a thesis by the end of the first two chapters they read, which may not be ▶ Chaps. 1 and 2, but may just as likely be the introduction and the last chapter or the method and findings. They are also likely to skim and review for presentation errors which also annoy many examiners (Golding et al. 2014). Moreover, some examiners will go straight to the methods chapter and, if they consider this section to be flawed, will be highly dismissive of the remainder of the content.

It is important for students to prepare their theses in such a way to ensure it is best placed to make the examiner's task easier rather than more difficult. Examiners should be able to easily identify what the new information is; they shouldn't be left wondering and having to search what the new information in the thesis is. In preparing for examination, we recommend the following:

1. Ensure all formatting is consistent throughout the document.
2. Place the research aims and questions early in ▶ Chap. 1 so the examiner is aware of these from very early in their reading.
3. Provide a glossary of terms to ensure shared meanings of key terms.
4. Use abbreviations and jargon as sparingly as possible.
5. Carefully edit the thesis for typographical and grammatical errors as these can be very distracting and annoying.
6. Make sure the thesis is coherent and that all chapters fit together logically to tell the story of the work undertaken.
7. Provide links between chapters (these are like bridges that take you to the next piece of work) – some students do this by providing an abstract to each chapter that links the chapter to the previous chapter.
8. Optimise methodological and conceptual congruency throughout the document.
9. Provide examiners with a list of all outputs from the thesis.
10. Remember publication in quality peer-reviewed publications is great insurance during examination.

**Conversation Box 9.2 Examination of Theses**

**Debra:** Speaking as an examiner, I like to see that there is strong internal coherence in the work – that is, that the methods suit the question, the data suits the methods and the findings are reported in ways that are appropriate for the data. Also it is vital that the thesis actually address the research question(s). When I think of the two weakest theses I have examined, neither of these actually addressed the stated research question. If there are publications from the thesis submitted as part of the material to be examined, I expect that these will be in quality peer reviewed journals.

**Kim:** I always start out with a positive view about the thesis and expect it to be good. I find this is mostly the case; but not always. In my opinion, the first impression does make a difference. I look through chapters in a cursory way to determine several things: the format and style is consistent, the introductory chapter is engaging, convincing, and sets the scene as well as introduces the study and reason for the study early, and then I look for examples of consistency throughout. One common problem with theses in the past has been lack of coherence around aims and research questions; many students I have examined have presented different versions of these in different chapters throughout the thesis. In a thesis by publication, I like to go to the papers in the actual journal. At this time, I also do an evaluation of the quality of the journal; it is important with theses by publication to look out for predatory journals at this stage.

**Patricia:** Key issues I look for is carefully and systematically addressing the research questions. I prefer to examine theses which are engaging and focussed on gaps in the literature and provide a strong justification for the thesis. Less is more is generally a good rule as well

**Thought Box 9.1 What Examiners Look for When Examining a Thesis**

Thesis examiners are looking for a number of key criteria and elements when completing their examination. These include:

- That the work is internally coherent.
- Demonstrated familiarity with and critical appraisal of the relevant literature.
- Understanding of the concepts and theories relevant to their project.
- Sufficiently comprehensive investigation of the topic.
- That methodology, methods, and techniques are relevant, justified, and conducted appropriately and that the candidate understands the methods.
- Results appropriately presented, described, analysed, and interpreted.
- Overall presentation is appropriate and meets the required standards.
- Being satisfied that the work was done independently and advances the field.
- An original contribution to knowledge in the relevant discipline area.
- Identification of areas that need improvement in order for the degree to be awarded or could be refined for subsequent publication.

written text that is succinct and engaging is much easier to read. Publication of elements of the doctoral work are also reassuring particularly if in good journals. I also like to see where this work is likely going in the future is important- so I particularly enjoy the discussion and conclusion section.

## 9.7 Outcomes of Examination

Once the thesis has been completed and is ready for submission, there will be a process to follow, and the information about the process will be located on the Internet and also through the Graduate Research School or equivalent. There are always forms that need to accompany the thesis, and each institution has a preferred format for submission. It may be that a certain number of copies need to be submitted in certain forms and in addition there is often the requirement of soft copies as either a word file or a PDF. There are also a number of signatories needed during the submission process. Once all the internal processes are followed, the thesis will be sent for examination. The examination process does take quite a while. Examiners are usually allowed 6 to 8 weeks to complete their examination, and sometimes they will also request an extension. For students waiting on the result, this can seem like an eternity. During this time, it is useful to plan some activities that add to the outcomes of the work, such as manuscript writing or development of postgraduate applications.



There are usually a number of outcomes available for examiners to select at the end of their deliberations; these can vary between universities. Most commonly the outcomes are as follows:

- The degree be awarded
- The degree be awarded once minor textual and other minor matters identified by the examiners are corrected
- The degree be awarded provided that the matters identified by the examiners are addressed to the satisfaction of the supervisors, head of school, or nominee
- The degree not be awarded but the candidate be permitted to revise the thesis in response to examiner reports and present for re-examination by the date specified (usually between 3–12 months)
- That the degree *not be awarded* but a Master degree be awarded (not available to master's degrees)
- The degree *not be awarded* (you will be comforted to know this is a very rare outcome)

In most cases, a student will receive one of the first three adjudications. Accepted without any revision is quite rare but it does happen; if that is the case, then congratulations will abound. In the case of results 2 and 3, the thesis will require some revision be completed. It is important at this stage to remain focused and remember this is similar to a revision for a journal article; a celebration is just around the corner.

## 9.8 Examination Feedback

The examination of the thesis will be prepared by the examiners as a piece of written feedback to address set criteria. The examination of a PhD thesis has been likened to peer review rather than assessment of an essay or assignment (Powell and Green 2007). Examiners' feedback usually includes a summative appraisal as well as developmental feedback from which the student is expected to revise their thesis (if revisions are required). In order to provide feedback to the student, an examiner assesses the quality of the work and come to a determination as to whether it has met the criteria required for the degree to be awarded. As some theses will include chapters with previously published work, these pieces of the study have already been subjected to external peer review. It is most often the case that examiners who see the need for correction in a student's work want to see action that leads to "more" or "better" work from a candidate (Holbrook et al. 2012) and hence they provide advice on how to achieve that outcome.

**Conversation Box 9.3 Receiving Examiner Feedback**

**Student:** I just received the feedback from my three examiners; it seems overwhelming and I don't know what to do.

**Supervisor:** Have you read it all carefully?

**Student:** No, I guess not.

**Supervisor:** Well, that is the first thing you need to do. I read the comments and I thought they seem quite positive.

**Student:** Ok. I did not feel that way. They all seemed onerous to me.

**Supervisor:** Did you read the comments and then focus on what is required of you?

**Student:** Probably not really as I became overwhelmed by the comments.

**Supervisor:** Well, I suggest you go away for a few days and then start a table that addresses the required changes and we can meet again to discuss a plan to address those changes.

**Thought Box 9.2 What Annoys Examiners?**

- Poor presentation – careless work and lack of attention to detail
- Writing too much text without critique and analysis
- Inconsistencies – aims, research questions, referencing, headings, and font size and type
- Referencing mistakes
- Repetition
- Having to read many, many pages before being told the aim and purpose of the study
- Multiple typographical errors
- Not referring to tables or figures

## 9.9 Responding to Examiner Feedback

If you receive an examination outcome that requires changes, it is best to address these as you would the revisions required for a submitted article. To begin, read each of the examiner reports and then carefully identify exactly what you are being asked to do. This is a very important step. Once you know what is required, set it out in a table and begin to undertake the requirements as requested. At the same time, add the changes to the thesis and highlight these changes.

**Thought Box 9.3 Addressing Examiner Feedback**

Develop a table such as the one below to help to easily identify the changes that have been made in the thesis in response to the feedback.

| Examiner comment | Student response | Location in thesis |
|---|---|---|
| The format of the thesis is not consistent and needs to be revised throughout | Thank you. I have revised the thesis and ensured that the formatting is now consistent throughout the thesis | Throughout the document |
| The Introduction chapter does not identify the aims, research questions, and rationale for the study until close to the end | Thank you. I have now moved these closer to the beginning of the chapter | Page 3 |



**Reflective Exercises**

1. How would a new supervisor decide on an appropriate student examination panel?
2. What if you cannot get an international examiner? How can you argue that a local person is equal to an international examiner in experience?
3. As a student, how would you select examiners to propose to your supervisors?

### Template 9.1 Potential Examiner's Template

| Name of candidate | |
|---|---|
| Potential examiner (name and affiliation) | |
| Nominated by | |

| Name of candidate | |
|---|---|
| Reason for nomination | |
| Known area(s) of expertise | |
| Previous examinations (if known) | |
| Previous relationships/collaborations with team members (if yes, state nature and most recent year of collaboration) | |
| CV attached | Yes<br>No |

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# After the Examination: Looking to the Future

Contents




D. Jackson et al., *Successful Doctoral Training in Nursing and Health Sciences*, https://doi.org/10.1007/978-3-030-87946-4_10

### Student Reflections

*"I finished my PhD 10 years ago. Doing the PhD changed my career and my life. I was working in ICU as a nurse when I did it and since finishing, my career has really taken off. I have the best of all worlds now, being a teacher and a researcher and still carrying a small clinical load. I love working with the students, making my contribution to the future of nursing. I am also involved in several funded research projects and have been doing some supervision of honours, Masters and PhD students. I have a clinical role too and so do some of the research work with the medical teams. Doing my PhD is the best thing I have done for my career. It has made me a much better nurse too".*

***

*"When I first finished my PhD I was offered a junior lectureship in the department I was enrolled in. I did that for a couple of years and got my papers all written up. Then I was delighted to get a post-doctoral fellowship for three years and that was a great opportunity and put me on a research trajectory. Now I have a clinical academic post and it is very satisfying to return to the clinical environment with my more advanced research skills and having more skills at critical thinking and a better ability to challenge issues".*

***

*"Now that I have finished, I think the most useful thing that my supervisors did was support the development of my future career throughout my studies. It wasn't just about my research project, and it was never about just finishing the thesis. My supervisors always encouraged me to keep an eye on what was next for me, and my career. In the last year of my studies, my supervisors also afforded me other opportunities to collaborate on projects. I was able to co-author papers and was invited onto other research projects. This enabled me to develop and consolidate the skills I had developed throughout my candidature. I was also able to increase my research profile, and develop networks with other scholars. I have so many colleagues who don't get this support. They finish their PhD and they are lost and don't know what is next. The support I received was invaluable".*

10

### Upon Reading this Chapter and with Further Reflection, Readers Will Be Able to Describe and Discuss

- The importance of the immediate post-doctoral years to overall career
- The significance of career planning as an element of doctoral training
- The role of supervisor as career mentor
- Establishing an academic identity
- How students can be supported to transition from doctoral candidate to doctoral supervisor

## 10.1 Opportunities After Graduation

When a nurse or allied health practitioner successfully completes a PhD, it is not only a major personal achievement for the graduate, but it is also important for the research community and the wider nursing and health disciplines. The graduate

will have generated knowledge through their work that will further develop the knowledge that underpins the discipline, and that is also an important part of continuing to develop an evidence base for practice and highly relevant when considering future career opportunities. Post-doctorally, the student needs to be able to move forward and develop an independent professional identity. In this chapter, we will consider the significance of career planning as an element of doctoral training, the role of supervisor as career mentor, and how this can extend beyond completion of the doctoral degree.

**Thought Box 10.1 The Meaning of a PhD When Looking for a Job**

Holding an earned doctoral degree tells prospective employers many things about a person:

- Personal tenacity
- Organisational skills
- Understands applied ethics
- Can see a project from commencement through to its conclusion
- Is able to locate and synthesise literature, the ability to take and use feedback
- Has the capacity to write up research findings and scholarly papers to a high degree of academic rigour for the purposes of disseminate work
- Capable of working collegially with a research team

Internationally, there are shortages of doctorally qualified nurses and allied health professionals, and so every single graduate is important to their discipline area. Therefore, on graduation, it is likely that many opportunities will be opened up to the graduate, and there are generally no problems for post-doctoral employment for nurses and others in health care. Each and every graduate has a contribution to make to their discipline and has the capacity to enhance the knowledge base and research activity of their discipline regardless of the sector they are active in – academic, clinical, policy, governance, third sector, non-government, etc.

However, great careers generally do not just happen. They are planned, and so it is important to ensure that preparations for the next phase of career are considered and actively planned for. This planning should ideally be a feature of the doctoral training years. We consider support with career planning to be an important aspect of supervision. In order to be optimally helpful in this realm, it is very useful to ascertain a student's career goals – to try to understand their own vision for their future as well as helping the student understand the breadth of opportunities that await and talking with the student to discern their plans for achieving their career goals.

**Conversation Box 10.1 Continuing Connections After the Candidature Is Complete**

**Debra:** I am very happy to still have connections with my own PhD supervisor who has been an amazing presence in my professional life for decades now. I also have continuing connections with many of the great scholars and scientists I have been privileged to supervise over the years. Some of the connections involve research collaborations, some involve shared supervision, others involve a more holistic mentoring connection and still others are transformed into a friendship where they know I am here to provide ongoing support, so if they need a referee or a critical friend, they will quite often reach out. It is always great to hear how they are doing. Several of my former PhD students and post-doctoral fellows are now professors themselves and I feel so proud them and what they have achieved. I have seen how hard they have worked over many years to contribute to their discipline, and I feel enormously honoured to have been part of their journeys.

**Kim:** I have maintained connections with most of the students I have supervised to date. These relationships are extremely important to me and even though many of the past students are from different countries or other States in Australia, we still retain a close relationship. For example, I continue to work with many very closely in research and other scholarly activities. Many of my previous students are now very highly esteemed scholars and researchers in their own rights and several hold very senior positions including ones such as professor and director. Watching the progress of these people is especially pleasing to me and I am immensely proud of all of their achievements.

**Patricia:** This is a wonderfully rewarding aspect of supervision, watching your previous students excel and thrive. Many of these individuals remain my close collaborators and friends. Taking the time to look at the lineage of supervision groups can be really exciting and impactful. It tells us about the power of science, the importance of human relationships and reminds us that we are always in a quest to discover and make the world a better place.



## 10.2 Leadership and the Doctoral Graduate

For many individuals, a doctoral degree is a seminal step on the leadership journey, and many doctoral graduates will assume leadership roles. The work undertaken, the experiences and situations exposed to during the doctoral degree, and the extended nature of work and collaboration with supervisors and other student peers help to shape and define leadership style as the graduate moves to the next stage of career. Much is written about leadership, and discussion of specific styles is beyond the scope of this text. However, regardless of style, there is general agreement that leaders set aspirational goals, build an inspiring vision, and create new pathways for self and others. As graduates define and refine the next chapter of career – the post-doctoral phase of career – considering leadership development as a part of this journey is important. As graduates break new ground in research and

understanding phenomenon in different ways, continuing to develop and enhance the skills needed to be a thought leader is a critical dimension of ongoing professional development. It is also useful to give some thought to the concept of leadership and encourage students to consider themselves in relation to leadership – to consider their strengths, weaknesses, style, and potential of leadership.

**Thought Box 10.2 Creating Opportunities for Students**

Doctoral studies are consuming and really do take a lot of commitment over a considerable period of time. However, it is never too soon to start thinking about what lies ahead, about life and career after doctoral studies are completed. There are many ways supervisors can support students to position them well for the next stage of career. Some strategies are to:

- Recommend students for opportunities to contribute to teaching activities in the department. However, this should be monitored to avoid students being overworked.
- Facilitate students to build and gain entrée into relevant networks.
- Create opportunities for students to demonstrate leadership.
- Encourage students to become involved in supervision activities and mentoring others.
- Support students to attend conferences and engage in strategic dissemination activities.

## 10.3 Thinking Ahead to Life Beyond Graduation

As we mentioned much earlier in this text, the role of supervisor has many elements, and these include mentorship, and this aspect is particularly important when it comes to career mentoring. Throughout the period of candidature, it is important for supervisors and students to both have a *whole of career* sensitivity – an awareness of where doctoral training fits into a student's overall plan for their career. While there are many career avenues that are open to doctoral graduates in nursing and health care, in our experience by far, the majority will choose an academic career that involves teaching, research, and academic governance of some sort. This is largely due to the many opportunities which is contrast to other disciplines, such as the humanities. Many doctoral students in nursing and health sciences have an interest in becoming career academics, and given there is a worldwide shortage of doctorally qualified nurses, this is generally quite a realistic aspiration for students to have. Others will choose a career in research or will take on an advanced clinical role, including clinical governance roles – far fewer will choose (or have the opportunity) to undertake formal post-doctoral training (see Fig. 10.1). Having said that, there are exceptions with some graduates making other choices, such as consultancy roles, working with government and non-government organisations, to develop policy and other key roles.

Regardless of the post-doctoral career aspirations that a student has, it is likely that their desired career path will be highly competitive, and so therefore there is a

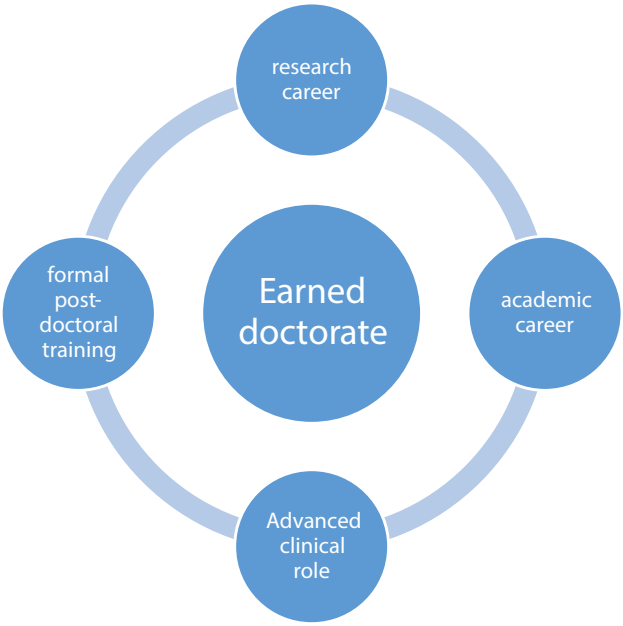


**Fig. 10.1** Post-doctoral career pathways in nursing and health care



need to actively incorporate preparation for that next phase into their doctoral training program. Ideally all activities should not only assist the student to successfully and purposefully work towards achieving their doctoral degree, but they should also contribute to the student being ready to enter the next stage of career and competitive to be successful. Facilitating the entry of students into the academic and research communities of their discipline is another area in which supervisors can provide real and tangible support to their doctoral students. Helping students by drawing them into their professional circles and making key introductions are some relatively simple strategies that supervisors can adopt to support students in building their networks and developing their own academic identity.

Developing an academic identity is an important aspect of building a career and takes place over a number of years. It is important for PhD students to realise early that the doctoral journey is one of transition: transition to a new way of being and thinking and where the student has new skills and capabilities. An academic or research career begins in most instances with the completion of the PhD. The PhD degree is thus considered the hallmark of a beginning where the post-doctoral researcher joins a community of scholars.

While students increasingly are publishing from their work in progress, there are still sometimes some outputs that are not completed at the end of candidature. So, completing students must first ensure they complete the disseminations arising from their work. It is particularly important to remember there is an ethical dimension to ensure that study results are disseminated appropriately. Study participants generally take part in research to help contribute to knowledge, to help improve

services; not necessarily so someone will get a doctoral degree. So, we believe very strongly that it is important obligation to research participants to ensure the knowledge they have shared through the research is disseminated appropriately to better broaden knowledge, raise awareness, and effect change.

**Conversation Box 10.2 Helping Students to Build Their Networks**

**Debra:** There are lots of ways of doing this such as through organising and supporting visiting scholars and then ensuring students have access to engaging and connecting with those scholars. One thing I like to do is when visitors come to our research community, I ask students to prepare a 5 min overview of their project to present. I have found visitors greatly enjoy this and it gives students the opportunity to get feedback and input from international scholars in their fields. If students are going to conferences, I look to see which of my connections will also be there and usually send an email introduction and see if they can meet up.

**Kim:** I also like to encourage students to present their work widely. Many students feel guarded about presenting their work as if they are worried that their ideas may be stolen. I believe that students need to have as many opportunities as possible to propose their ideas and receive feedback; this feedback strengthens their thinking and helps to cement their approaches to their research. I encourage my students to present at local doctoral events, university seminars and conferences, and national and international events/conferences. These opportunities all assist the student to improve their study design and theoretical positioning. I am always looking for opportunities to help my students develop national and international linkages; I believe this is an important part of our role as a supervisor-to provide our students with connections to people who can help them to develop their future research careers.

**Patricia:** I think the supervisor can play a critical role in sponsorship- that is nominating students for particular task and opportunities. I also really encourage a positive social media presence. All too often I see students presenting at conferences that are not strategic and therefore a waste of time and money. Where you choose to present your work is an important strategic decision.

## 10.4 Developing a Personal Mission Statement

A personal mission statement can be useful in charting the future through clarifying and articulating personal purpose and values. Taking the time to identify your values and purpose and assess your strengths, weakness, and previous successes and values can be really useful in helping you work out where you need to go. This can help to keep you on track to achieve your goals and achieve your purpose. Sometimes it can help you to identify what to say no to particularly as you emerge

from your doctoral program and you are faced with multiple paths. Some thoughts to get you started:

- What are your core values that drive your work as well as professional and personal identity?
- What are the things that excite you and fuel your passion?
- What are you trying to excel at and what do you want to be known for?
- What are your unique strengths?
- How would you like your legacy defined?

**Conversation Box 10.3 Supporting the Development of PhD Students**

**Debra:** For me, this is a very important aspect of supervision. I encourage my students to actively plan for their future careers and work with them to identify the skills and experiences they want to gain through their candidature. Once identified we work together to ensure that they have opportunities to get those experiences.

**Kim:** I believe this is an integral role for a supervisor. I encourage the student to think about their post PhD career early on-perhaps by the end of the first year. I think it is best to plan early because post-doctoral research positions in particular will require the student to have a good record of accomplishment to be considered competitive. For me, I like to plan publications and conference presentations as well as meetings with strategic people, opportunities to be named on funding submissions, and the development of applications for awards. This is a good time to get students to consider potential funding such as fellowships and similar opportunities.

**Patricia:** This is perhaps one of the most exciting aspects of supervision seeing your students grow and flourish. A doctoral degree can take the individual in so many directions- not just an academic or clinical career. But whichever direction you choose takes planning and coordination. We often talk about this in our group supervision meetings. Communication skills are also critically important and I really like to encourage these from academic presentations to media.



## 10.5 Career Planning and Doctoral Supervision

Many universities offer workshops and similar events for students to help them to prepare their curriculum vitae (CVs), and we do encourage our students to participate in these types of events as needed. There are also many software packages to support CV preparation that may be useful for students. When preparing their CV, it can be very useful for students to articulate the skills and micro-skills they have attained through the doctoral studies (as well as through their previous studies and work) and highlight the transferable nature of these to paid employment. Transferable skills can include project design, project management, time management, ability to prioritise multiple competing tasks, ability to be self-directed, ability to engage productively and positively with feedback, and so on. In planning our semester-by-semester goals with students, we do try to have a focus on actual outcomes that can enhance and strengthen students' CVs.

It is important for students to understand the importance of the post-doctoral period (particularly) to the development of academic and research careers and the stages of research career they will move through. Each of these stages carries its own set of expectations, and there are funding opportunities associated with each of these research career stages. For the first 5 years after the awarding of the PhD, a researcher is considered to be an early career researcher (ECR), and in some funding rounds, there are special funds available for ECR. However, career interruption such as occurs with childbirth, sickness, or caring responsibilities are considered and taken into account by many agencies when assessment of ECR status is being determined. Following ECR, a person is considered to be a mid-career researcher (MCR) for another period of time.

The immediate post-doctoral years are often among the most productive years in an academic or research career, as the graduate goes forth to complete their publications and establish themselves as independent researchers. Their skills are fresh, and they are able to take advantage of various post-doctoral opportunities, such as fully funded post-doctoral fellowships available through various avenues such as universities and major research funding organisations. Many institutions do recognise this period of productivity and make support available in the form of writing fellowships and small seeding funding that is specifically designed to support new doctoral graduates as they seek to establish themselves as an independent researcher. For students, it is important to research the post-doctoral opportunities that are available and to note the criteria, the purpose of opportunities, the application procedures, and the closing dates of these opportunities.

**Reflective Activity 10.1**

During a supervision meeting, Rhama's student states they have been approached to do some casual teaching within the department. The student is excited to have had this offer and is very keen to do this work. The student is a full-time doctoral candidate and also does two shifts a week at the local hospital. However, the student discloses to Rhama they would very much like to be able to apply to join the academic staff of the school in a continuing role, just as Rhama did, once their PhD is completed.

1. How could Rhama guide the student here?
2. What factors should Rhama raise with the student?
3. What options are available to assist doctoral students to gain the skills needed to successfully transition into academic life?

## 10.6 Professional Development for Supervisors

Most universities offer professional development around supervision, and we recommend making the most of what is on offer. Supervisors can also benefit from updating on methodologies and also participating in courses around cultural issues for supervisors. As already stated, we have each taken various forms of Indigenous-

led training and micro-credentialing in relation to supervision of Indigenous students and have found these opportunities to be very valuable and enriching to our practice as supervisors.

As each student completes candidature, it can be a very useful activity for the supervision team to come together and spend some time to reflect on the candidature, to assess the performance of the team, and to consider issues such as what worked well for the student and the team, things that would be done differently if the clock could be wound back, and what team members learned about themselves as supervisors through the process. It can also be very illuminating to let a period of time elapse (not sooner than 8–12 weeks) and contact the graduate to see if they would be prepared to provide the team with any feedback on the supervision experience from their perspective. In this way, the team may be better able to identify the elements of the supervision journey that worked well for the student and the supervision team, as well as recognise and respond to elements and issues that were challenging or difficult for student and/or supervisors.

**Reflective Activity 10.2**

Take the time to consider the following questions.

1. What do you want to be known for?
2. How would you describe your expertise?
3. What are your values and personal mission statement?
4. Who are the key players in your area of expertise?



**Reflective Exercises**

1. Supervisors:
   (a) Thinking back to your own doctoral training, how did you prepare for life after the PhD?
   (b) What relationship do you still have with your own doctoral supervisor(s)?
   (c) Consider your own post-doctoral years. What were your main achievements in these years? What supports did you have to build your own research career? What supports do you think would have assisted you to make the most of your post-doctoral years?
2. Doctoral students:
   (a) What career path do you hope to take up on completion of your doctoral degree?
   (b) What do you want to achieve in the first 5 years after completion of your doctoral degree?
   (c) What resources and opportunities will be available to you on completion of your doctoral degree?
   (d) How can your supervisors help you to achieve your post-doctoral goals?

## Further Reading

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# Supplementary Information




D. Jackson et al., *Successful Doctoral Training in Nursing and Health Sciences*, https://doi.org/10.1007/978-3-030-87946-4

# Final Thoughts

As we write the concluding pages to this book, the world is gripped in the hold of a deadly pandemic that has raged for more than 18 months. One of the things this pandemic has highlighted is the absolute need for a highly qualified and skilled workforce in nursing and health care. This crucial workforce requires a strong evidence base to inform clinical practice and patient care, as well as a cadre of doctorally qualified and research ready personnel to evaluate care as well as develop and conduct the research that can address problems and generate the knowledge needed to improve health care. Yet, there is a worldwide shortage of doctorally qualified nurses and allied health personnel. Attempts to address these shortages have resulted in new approaches to doctoral education, particularly for those applicants with clinical backgrounds. However, we believe that while the form and structure of doctoral studies may change, the distinctive and unique relationships that underpin the pedagogy of supervision as well as the nature and duration of the degree mean that the vital importance of high-quality supervision will continue. We believe that quality doctoral education and supervision is now, and will remain, a matter of vital importance to the future of health care.

# Glossary

**Academic writing** refers to a formal writing style characterised by structure, evidence, and planning. May be descriptive, analytical, persuasive, and/or critical.

**Acknowledgements** usually appears at the front of the thesis and is the part of the work in which students acknowledge all the parties that contributed to the successful completion of the work.

**Adversity** dealing with obstacles, difficulties, or misfortunes.

**Avoidance** refers to not dealing with or dodging an issue. Generally considered to be maladaptive.

**Author integrity** refers to authors working with honesty and veracity and attributing all sources and contributors appropriately; not breaching accepted author requirements; not committing author misconduct.

**Author misconduct** occurs where an author assumes authorship when they do not meet the criteria for authorship or otherwise breaches acceptable and accepted author conduct.

**Authorship** refers to being the writer or creator of a text, document, or other creative work.

**Authorship order** refers to the order authors are named on a paper or other output. There are various approaches to organising author order and various weightings attributed to authorship, according to order.

**Candidate** a term sometimes used for a doctoral student.

**Candidature – full time** where student enrolment requires the student works on the requirements of the degree for at least 35–40 hours every week for at least 48 weeks each year or as stipulated by the institution.

**Candidature – part time** where a student works on the requirements of the degree for a proportion of the period of a full-time candidature and candidature is extended for a proportionately longer period of time.

**Career planning** a process to determine future goals.

**Career progression** developing a career to a more advanced level.

**Coaching** a partnership to enhance career or personal development for one of the partners in particular.

**Community of practice** a group of people with a shared goal coming together to further their goal.

**Confidentiality** retaining privacy of information.

**Confirmation** a procedure to determine progress and suitability to proceed with a study.

**Conflict** a disagreement between two people or more.

**Conflict of interest** when a person's personal interests could compromise or give the impression of compromising judgment, decisions, or actions.

**Critical thinking** the process of analysing, synthesising, and evaluating information.

**Critical analysis** analysis and evaluation of ideas.

**Critique** a systematic evaluation of information.

**Culture** refers to the mores, habits, beliefs, and practices of a particular social, ethnic, or other group; knowledge belonging to a particular group of people.

**Cultural differences** the beliefs, customs, and practices that define one group as different to another.

**Cultural factors** the beliefs, practices, norms, traditions, and languages that distinguish a group of people.

**Cultural mentor/advisor** involves a continuing mentoring relationship with someone from a different cultural group.

**Director of studies** the university faculty member appointed to guide a graduate student through the research and coursework requirements of their research degree programs. See also *doctoral supervision* and *supervision.*

**Doctoral defence** oral presentation and examination of doctoral work; can occur at set points throughout candidature and/or as a final examination. See also *oral examination, viva,* and *viva voce.*

**Disability support plan** an individualised and agreed plan for support and adjustments for students with a disability who are registered with disability services.

**Distance supervision** where the supervisor and student are in geographically distant locations, may be in the same country or in different countries. See also *supervision.*

**Doctoral supervision** the activities of university faculty members appointed to guide doctoral students through the research and coursework requirements of their research degree programs. See also *supervision.*

**Doctoral training** the period in which a doctoral candidate is enrolled in a doctoral program.

**Doctoral research** research that is undertaken by a PhD student to contribute to new knowledge in a specific field.

**Early career researcher** (ECR) an emerging researcher with no more than 5 years post-PhD completion. Career interruption can be considered when estimating ECR dates.

**Editing** correction of writing with the aim of improvement of clarity and presentation.

**Established researcher** a researcher who has conducted research over at least a 10-year period and has established a solid track record of outputs.

**Ethics** the branch of philosophy that deals with morals. In research, ethics refers to the application of ethical principles to research design as well as the conduct of research. Ethical approval from a duly constituted human or animal ethics committee is needed for all health research activities.

**Examination** the final and formal process where a PhD student' thesis is evaluated by external examiners.

**Examiners** the qualified and experienced academics/researchers nominated by the university to examine a PhD thesis.

**Feedback** evaluation and commentary that is provided on drafts of work or final versions of work, aimed at encouraging deep learning and intellectual growth, information that can help with subsequent writing and research activities.

**Feedforward** refers to commentary on work that aims to guide and inform future work.

**Genre** a category or style of literature, art, or other creative work.

**Globalisation** refers to the worldwide integration and interaction of people, organisations, and governments.

**Imposter syndrome** feelings of inadequacy, feeling you are not as competent as others perceive you to be, feeling like a fraud in an environment you feel you don't belong in, considered to be a psychological pattern whereby a person harbours doubts about their skills and talents, and attributes success and accomplishments to luck.

**Internal coherence** congruency in all aspects of the thesis – the methods are appropriate to address the aim, the data and analysis are appropriate to the method, etc.

**Joint authorship position** where more than one author assumes a particular position on a publication or other research outcome.

**Learning contracts** a written agreement between a student and supervisor outlining what is expected to be achieved in a specific period and the method of assessment of that learning.

**Mentoring** refers to professional relationships in which a more experienced person influences, guides, coaches, and supports a less experienced person; both mentor and mentee are enriched through the relationship.

**Mid-career researcher** an emerging researcher with no more than 8 years post-PhD completion. Career interruption can be considered when estimating MCR dates.

**Oral defence** another term for oral examination; see also *viva* and *viva voce*.

**Originality** providing some new knowledge or insight into the field or discipline in which the student is studying.

**Pedagogy of supervision** the deliberate, planned, and systemic educational interventions implemented to support learning and the generation of knowledge, recognising and supporting the relationships integral to doctoral studies.

**Peer review** systematic and rigorous assessment of academic, research, and scientific work by others working in relevant fields.

**Perfectionism** a personality style in which a person strives for perfection. Is often accompanied by self-doubt and self-critique and difficulties in engaging with feedback. Can be paralysing and cause delays in progress.

**Plagiarism** refers to the practice of taking the intellectual or creative work of others and representing it as one's own.

**Post-doctoral** refers to the period following graduation from doctoral studies.

**Post-doctoral researcher** a researcher who has completed a PhD and commenced an independent research career.

**Postgraduate tutor** a member of the faculty or academic staff with responsibility for the welfare, pastoral care, and academic studies of postgraduate students in their department (UK).

**Predatory publishers** often deceive researchers through aggressively soliciting papers and accepting them for publication without rigorous peer review or the usual peer review processes. Can be difficult to distinguish from legitimate, established journals because predatory publishers will attempt to copy and mimic established journals.

**Professional doctorate** is comprised of a mix of thesis and coursework and sometimes also has a practical component; often has a focus on addressing practical issues and problems and developing solutions to complex problems. Candidates are admitted based on professional qualifications and experience.

**Progression** the process of moving along the student trajectory towards satisfactory completion of the degree.

**Progress reports** a formal reporting mechanism that records the activities, milestones, progress, and impediments or delays experienced by students enrolled in a research higher degree. Is usually done once or twice per year, depending on institutional processes. Is usually done in collaboration between supervisors and students. See also *progress reports.*

**Publication plan** a structured and formalised plan for dissemination of research findings; includes peer-reviewed publications, other publications, conference presentations, and other outputs.

**Resilience** the ability to thrive and continue to progress, even when faced with setbacks and adversity.

**Review of progress** a formal reporting mechanism that records the activities, milestones, progress, and impediments or delays experienced by students enrolled in a research higher degree. Is usually done once or twice per year, depending on institutional processes. Is usually done in collaboration between supervisors and students. See also *progress reports.*

**Social support** support than can be accessed through connections and ties to other people, groups, institutions, and the community.

**Splitting** a destructive and hostile dynamic that involves personal attacks, blaming, and projection.

**Social media** interactive Internet-mediated technologies that provide the means for the sharing and exchange of ideas and information and other forms of expression through online networks and communities.

**Supervision** the activities of university faculty members appointed to guide graduate students through the research and coursework requirements of their research degree programs. See also *doctoral supervision.*

**Supervision meetings** formal or informal meetings that occur between research students and their supervision panel for the purpose of discussing and feeding back on the progress of the candidature and associated research work.

**Supervision panel** the team of supervisors or advisors that work together to support a research candidate.

**Student life** refers to the range of activities and events available to students enrolled in a university, maybe on campus or mediated through interactive online platforms and other means.

**Time management** refers to the practice of planning and applying conscious control of time on specific activities, generally aimed to increase efficacy and proficiency and in order to achieve specific goals.

**Thesis** the document that is submitted as part of a research degree that contains a report of the original research undertaken for the degree.

**Traditional doctoral thesis** is a document submitted as part of a research degree that contains a report of the original research undertaken for the degree, comprised of a series of chapters that together provides a complete, comprehensive, and systematic account of the research.

**Viva** another term for oral examination.

**Viva voce** see viva.

**Writer's block** occurs when a writer is unable to produce writing or creative work. It is considered to be due to psychological factors rather than a lack of time, commitment, or skill.

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