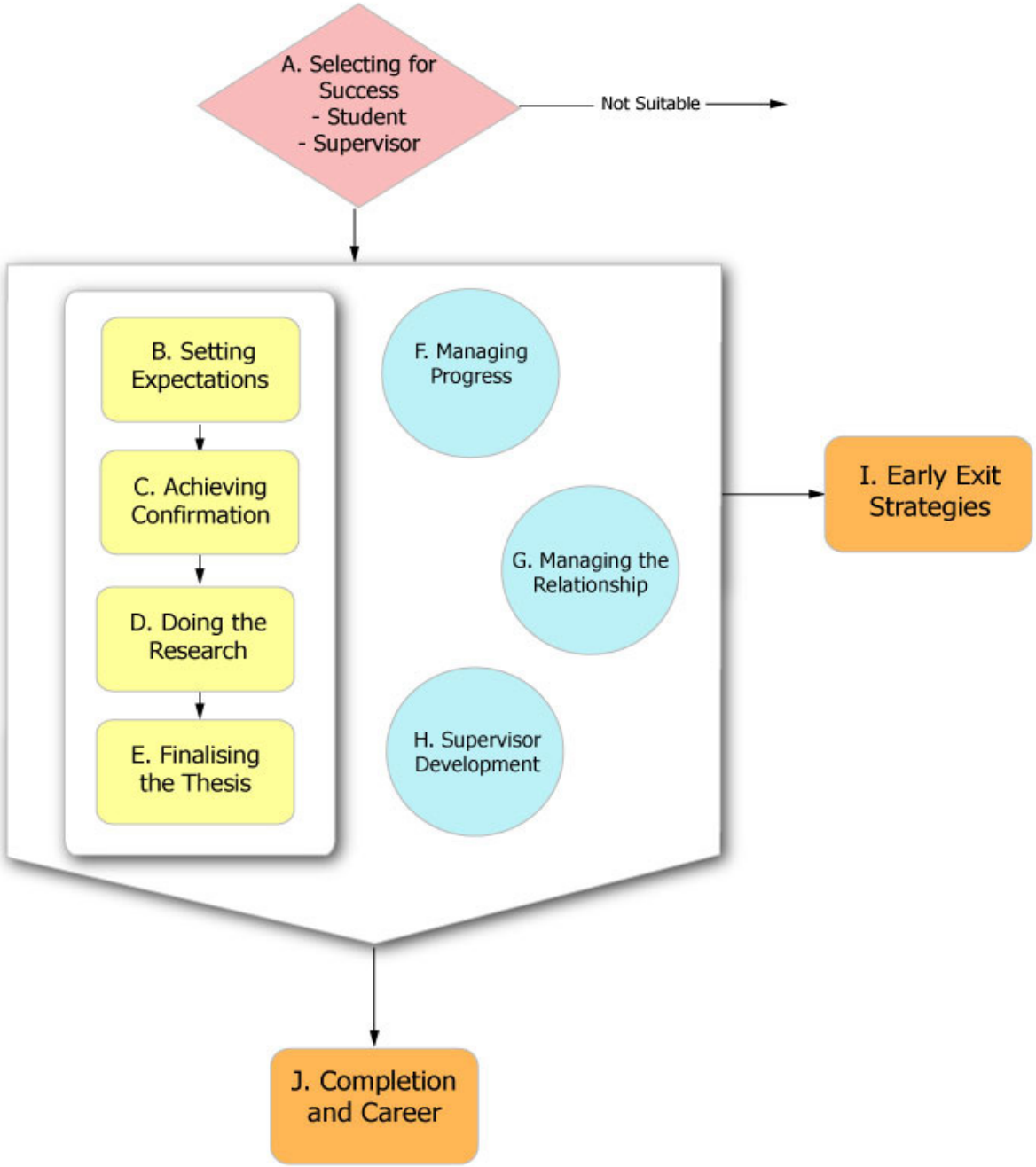
Improving HDR Supervisor Practice



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What this book is

This is a resource book to assist supervisors of Higher Degree by Research HDR students to develop the quality of their supervisory practice. It is also a useful resource for anyone, who is associated with supporting HDR students and seeking to better understand the supervision role.

This resource book provides a range of components and tools, which have been developed collaboratively in five universities through interviews and workshops with HDR supervisors. The materials in this resource book distill the experiences and reflections of many experienced supervisors to provide tools and learning materials all HDR supervisors.

While most universities have a primary focus on compliance and ensuring that all supervisors understand the policies, forms, resources and support services that underpin best practice research supervision, this resource book aims to go beyond compliance. The goal is to provide the knowledge that has been gained from diverse experiences of supervision to accelerate supervisor development and to prepare supervisors for experiences in the future. However, this is not just an individual journey, and the materials will hopefully encourage collaborative discussion and build local communities of practice about research supervisors as supervisors discuss their dilemmas and ideas.

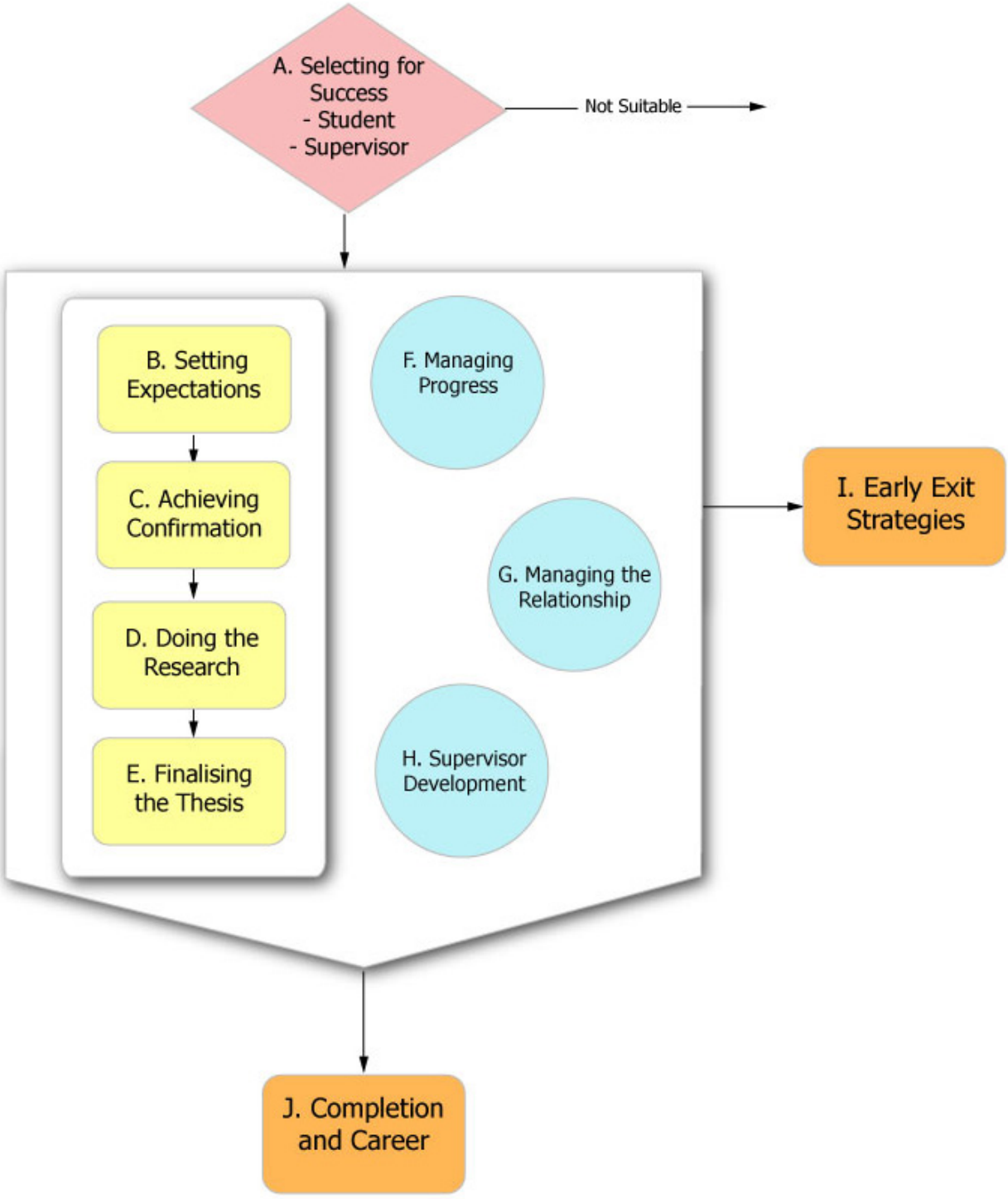
This Supervisor Resource Book provides supervisors with knowledge and tools that will improve supervision practice. It has been developed to:

- act as a source of knowledge and tools for individual supervisors, who wish to improve their supervisory practice,
- provide materials that explore the dilemmas of supervision practice to stimulate individual thought and collegiate discussion in supervision 'Communities of Practice',
- support formal university seminars aimed at improving the practice of supervisors and those associated with supporting HDR students, and
- support online courses aimed at improving the practice of supervisors.

Undertaking a research degree involves a number of activities that all contribute towards the creation of a final research thesis object, be this a traditional thesis or a creative work with an exegesis. The research project, like other projects, can benefit from the use of project management principles to sequence and accomplish the various tasks that are associated with its undertaking. Helping your student plan and organise the research project will enable you to achieve positive outcomes from the project. The model of supervision that forms the framework for this resource book therefore uses project management principles to structure the life-cycle of a research project and address the various responsibilities of the institution and the supervisors.

How this book is structured

This Supervisor Resource Book is based on a project management approach to HDR student supervision that covers the ten key areas of supervision practice shown in the diagram below. This resource book has a section for each component of this model and its specific tools.



How to use this workbook and the tools

The following sections of the workbook address each of the components of the project management approach to supervising HDR students. Each section provides an overview of the component, a rationale for why such action and knowledge is important, and an introduction to the associated tools that supervisors can review, adapt and use.

Some tools generate thinking about situations that are yet to be encountered, while other tools provide templates for interaction with students and other supervisors. While the tools can stimulate individual reflection and be used as part of supervision interactions, they also provide an ideal resource for collegiate discussions and workshops to build local and cross-disciplinary 'communities of supervision practice'.

These tools should be considered in the context of relevant ECU policies such as:

- Supervision of students undertaking Higher Degrees by Research (HDR),
- Higher degree by research student support,
- Responsible research conduct,
- Research data and records management, and
- Authorship, publication of research, and peer review

These tools complement the advice and tool provided for ECU's HDR students in GRIP (the online Graduate Research Induction Program), that HDR student are required to complete to achieve confirmation of candidature.

Reflecting on development and improving this workbook

This Supervisor Resource Book is based on a project management approach to HDR student supervision that While these resources have collected and collated a wealth of supervision experiences from novice and experienced supervisors across all disciplines and reflect a number of university systems within Australia, they remain a work in progress as knowledge grows and the discourses constructing research supervision change. We would encourage all users of the workbook to:

- adapt and develop the tools for their own unique situations.
- changes and additions to improve tools and
- indicate how additional tools might be developed to support supervisor development and to achieve the central goal of this project – the timely completion of influential higher degree research studies.

For more supervision resources and tools

Most of the tools in this book were developed at ECU.

The tool developers drew on the texts on supervision listed below and can recommend their use.

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A. Selecting for Success

Introduction

The most critical decisions about candidature are made at the start of process, when applicants are assessed and those who are successful are allocated to supervisors. Offering a student a place in an HDR program involves making a significant commitment (both in terms of university resources and in terms of raising student expectations), even though HDR candidature is not confirmed until after the candidate has produced an acceptable research proposal.

The first of those critical decisions relates to the capability of the student and the capacity of the university. Does the applicant have a relevant focus and sufficient capability and energy and to achieve the Higher Degree to which they are applying to gain entry? The second of those critical decisions relates to supervision capacity. Is there a relevant compliant supervisor with sufficient supervision capacity for each specific student and does the intended focus of the investigation fall within both potential supervisor capability and within the current university research strengths?

Second, a decision has to be made about which supervisors would make the most appropriate team for a specific student.

Tools

As shown below, the Selecting for success component has two main subcomponents, each with its own specific tools.

Subcomponent	Relevant tools
A1. Involving yourself in the application/selection processes	A1.1 Self-auditing A1.2 Identifying your role in the application/selection processes A1.3 Attracting prospective HDR candidates to work with you
A2. Assessing the student and application	A2.1 Informal profiling A2.2 Probing academic background and potential A2.3 Probing research experience and capacity A2.4 Probing English language competence A2.5 Probing the research project's feasibility and fit A2.6 A weighted risk assessment
A3. Selecting/forming a supervisory team	A3.1 Screening potential members of supervisory team A3.2 Supervising work colleagues – issues to consider A3.3 Assessing potential supervisory teams A3.4 Canvassing potential supervisory team members

These tools can also be used productively when considering the need for changes to the supervision arrangements later in the research journey.

A1.1 Self-auditing

As with all work roles there are a range of skills, knowledge and attitudes that supervisors require to do an effective job. In many ways, learning to supervise is a lifelong development, where each experience contributes to a supervisor's capability, but only if there is conscious and productive reflection. While one of the first acts of a supervisor is to audit the capabilities of every new research candidate, attention should also be given to what each member of the supervisory panel knows, is learning, and is still yet to know.

The table below maps the basic skills, knowledge and attitudes that competent supervisors possess and the critical action imperatives that underpin effective performance.

Skills	Knowledge	Attitudes	Action Imperatives
Effective communicator	System expert	Uses student abilities	Establishes research Purpose
Motivator – Inspires	Study Planning expertise	Ensures praise	Focuses study down to what can be done
Gains Respect and Trust	Understands mentoring role and options	Provides understanding	Diarises meeting dates at the close of every meeting
Establishes rapport	Knowledge of local research support network	Listens to student issues and progress reporting	Monitors timelines and sets deadlines
Manages the process	Expertise in thesis production	Confronts progress issues early	Clarifies Imperatives
Sets work tasks	Broad knowledge of research paradigms	Is fair in assessing progress and work	Provides clear direction verbally and confirms in text
Checks meaning	Tool kit of templates for students	Seeks help and support	Responds in a timely fashion
Gives accepted feedback	Current links to the field of Practice	Seeks external review	Responds according to student urgency
Provides a cognitive apprenticeship	Expertise in presentation	Seek collegiate support	Responds to questions
Determines blocks	Expertise in article production		Celebrates success and adversity
Recognises learning style			
Can edit and feedback			
Extends student capability			
Plans to integrate student load and interaction			
Mentors new supervisors			

A1.2 Identifying your role in the application/selection decision process

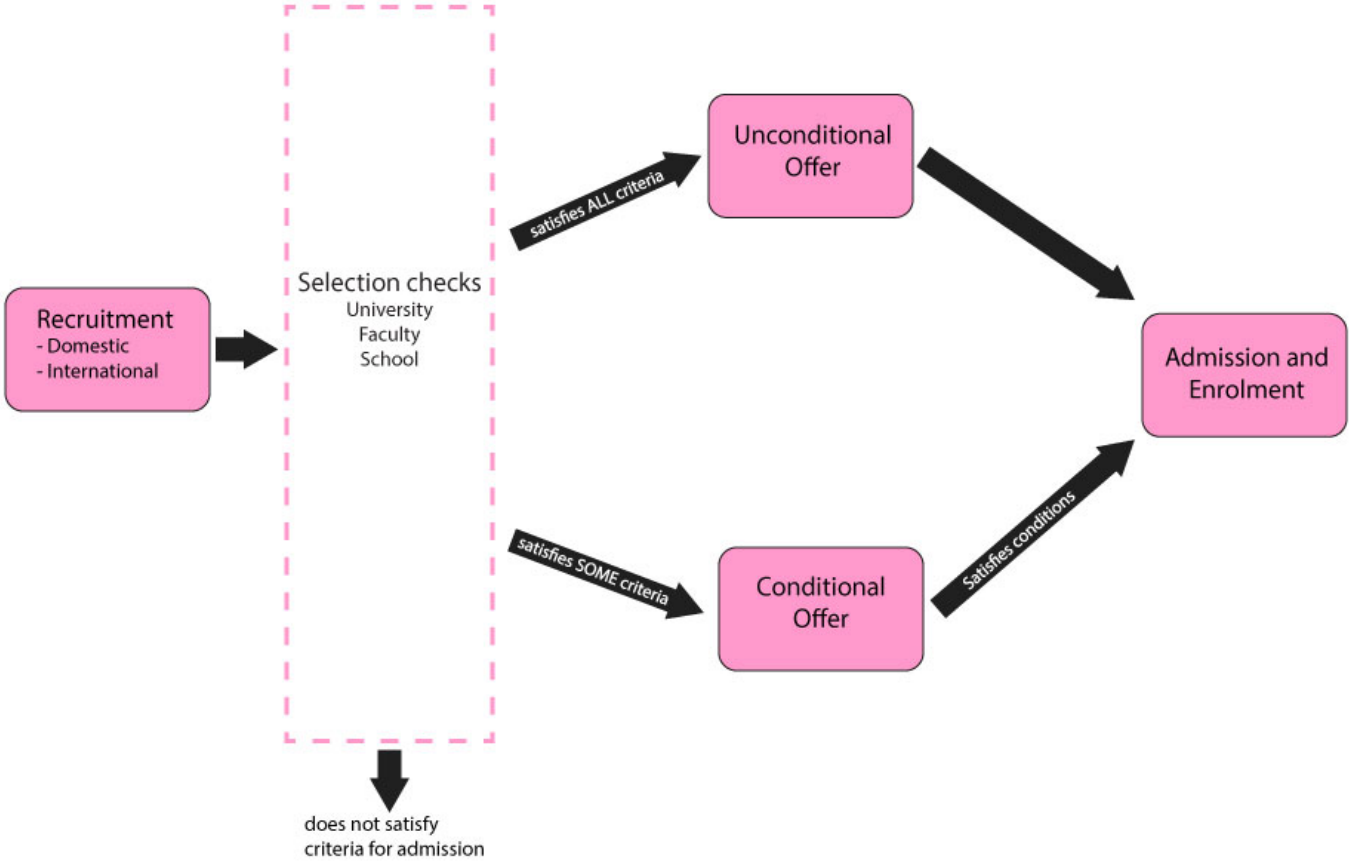
Student applications come from a variety of directions. These include international and domestic application channels, Graduate School contacts, Faculty contacts, and students who have developed applications with potential supervisors.

The selection process may be collaborative and transparent or central and opaque, but is often the subject of policy changes and is usually unique to each institution. The decision to allow the candidate to enroll for a research degree at an Australian university may, for instance, by made by a Graduate Research School, the Primary Supervisor, the Head of School, the Faculty or even a panel of reviewers.

Following the suggested 4-step process outlined below, will:

- keep you up-to-date about the decision making process,
- aware of which roles impact on such decisions, and
- equip you to provide relevant information to prospective students seeking to enrol.

Step 1. Find out whether and how your school's and institution's current processes differ from the general process diagrammed below.



Step 2. Decide how proactive you need to be in order to maximise your own opportunities to:

- supervise the students you want on the projects that interest you,
- work with the supervisory teams you want to work with, and
- develop and apply your expertise in supervision.

Step 3. Decide how best to act at each relevant stage of the process in order to achieve your goals.

Step 4. Identify tools you can use to achieve your goals at each relevant stage of the process.

A1.3 Attracting prospective HDR candidates to work with you

New supervisors often feel uncertain about how to:

- attract prospective candidates who might be interested in working under their supervision,
- be invited to join a supervisory team, or
- have a candidate or candidates assigned to them for supervision.

This tool outlines three key steps you need to pursue in order to have the opportunity to start supervising, namely:

- understanding your institution's and your Department's policies and approach regarding the allocation of supervisors,
- marketing yourself, and
- identifying key supervision gatekeepers and champions.

Step 1. Understanding your institution's and your department's policies and approach to allocating supervision

This involves the two substeps outlined below.

Step 1a. Establish how your institution sources potential research degree candidates

Institutions source research degree (and especially doctoral) candidates in a range of ways, including:

- formal institutional agreements with government or other sponsors at the University level, which generate cohorts and/or an agreed number of incoming new research/doctoral candidates for whom supervisors need to be sourced,
- PhD (or Masters) position/s and scholarship/s incorporated in an external grant bid (e.g. ARC) by one or more Chief Investigators (CIs). Should that grant is awarded, the CIs for the grant then have the opportunity to advertise and recruit for the PhD (or Masters) position/s and scholarship/s,
- open advertisement by the university of scholarships and degree places through the media and on the national scholarship database (JASON **http://www.jason.edu.au/**) with panel selection of awardees on a merit basis,
- international recruitment through overseas marketing and recruitment activities, such as participation in recruitment fairs,
- individual or institutional promotional efforts via targeted academic networks or through the website based on the reputation and area/s of research of a Research Group or a specific supervisor/s, and
- informal talent identification and recruitment from current students, especially high performing 3rd year undergraduates or students undertaking initial research training through an Honours program or Masters program with a minor thesis.

Step1 b. Understanding your Departmental/School processes

The importance of being aware of the approach within your Department/School and immediate work group to sourcing research degree candidates and allocating supervision depends on:

- the scale of the graduate research operation at your university and,
- the extent to which policy and procedures are centralised or decentralised

Identifying the approaches used within your institution and department/school enables you to plan how to best position yourself to be considered for appointment to the supervisory team/s. You need to:

- know what you can and can't commit to should you be directly approached by potential HDR candidates,
- know how best to assess your initial interaction with any potential HDR candidates,
- know how to direct enquiries from potential HDR candidates to the official admissions channels

after a positive initial interaction with any potential HDR candidates,
- establish the institutional and Departmental/School expectations regarding the number of research degree candidates normally supervised by individual supervisors as principal supervisor, co/associate supervisor or members of supervisory teams,
- ensure that you understand the institutional and Departmental/School policy regarding the number of candidates that can be supervised at your level and in your current appointment role,
- establish whether Early Career Researchers and/or academics new to HDR supervision are expected to demonstrate their capacity for HDR supervision by successfully supervising one or more shorter projects at Honours or Masters minor thesis level, or by working with an assigned senior supervisor who will mentor them, and
- negotiate for a realistic workload allocation that will enable you to have sufficient time to accept research candidate supervision, if one or more opportunities should become available.

Step 2. Marketing yourself
No-one will think of you or request you as a potential supervisor unless they know about you!

Teaching senior undergraduates, Honours and/or Masters students can provide excellent opportunities for you to market your interests and skills.

As the web is the most important vehicle for building your public profile and awareness of your research areas and achievements, make sure you provide the sort of information that prospective research candidates and others helping to source supervisors (e.g. admissions staff and coordinators helping with supervisor allocation) are looking for. Your web presence should include at minimum:
- your qualifications,
- research interests,
- current research projects,
- publications,
- teaching areas (where relevant), and
- your supervisor registration status.

If you have supervision experience, it is also helpful to list current or previously supervised projects.

If your institution uses a search engine to assist in the identification of supervisors, ensure all the key relevant search terms link to your profile.

Many universities also allow or encourage supervisors to provide short project briefs for new projects on their website to assist in attracting prospective candidates. If given the opportunity, you may wish to do this. Likewise, if one of your senior colleagues has nominated projects that match well with your expertise, enquire whether you might be a nominated associate supervisor for one of these.

3. Identifying key supervision gatekeepers and champions
Every university has key personnel, whose roles give them the opportunity to influence the allocation of supervisors or to seek potential interest from a prospective supervisor. These gatekeepers and champions can include:
- School/College/Department coordinators of (post)graduate research,
- Heads of Department/School/College,
- School/College level administrative support staff, who assist with admissions applications,
- Associate Deans of Research Training at the Faculty level
- Research Group leaders,
- Directors of Research Centres and Institutes or those within who are responsible for the HDR program,

- Senior academics in your field,
- Honours and Masters coursework coordinators, and
- Graduate Research School or Office staff, who administer the admissions process.

Once you have identified these key gatekeepers and champions at your university, make sure they:
- have met you,
- have a copy of your CV,
- know about your disciplinary and methodological expertise, and
- know how eager you are to start to get some supervisory experience.

Remember that a busy senior academic Principal supervisor may look kindly on your willingness to join and contribute to a supervisory team in exchange for providing you with mentoring in supervisory practice.

Watch out for email or other calls for expressions of interest in take on supervisory roles. It is not uncommon for a department/school/college coordinator to circulate a prospective candidate's CV and application to see if there is any interest from potential supervisors.

As many institutions only require the Principal supervisor to be confirmed prior to the admission of an HDR student, make sure you:
- meet any new research degree students in your field,
- get to know about their projects, and
- get to know who their Principal supervisors are.

Once you have that information, you can put yourself forward as a suitable associate supervisor during the pre-candidature period.

A2.1 Informal profiling of student capabilities

An initial appraisal of a potential HDR student needs to consider in detail:

- how the applicant measures up to institutional minimum entry standards and requirements,
- the evidence of the applicant's academic preparedness,
- the match of (inter)disciplinary interests and orientation, and
- more subjective aspects, such as the individual's diligence and openness to learning.

Supervisors surveyed in the OLT Supervision project:

- were most concerned about encountering students with poor writing skills, low English proficiency and inadequate research skills,
- mentioned that if students lacked computer skills, mathematical or statistical skills, time management skills or a willingness to act on feedback from their supervisor, it can lead to tensions,
- acknowledged that cultural issues added to the complexity of the supervisor-student relationships, and
- accepted that students may have to contend with unforeseen personal pressures such as health complications, family pressures, not having sufficient resources to complete the study or not being able to give sufficient time to their studies.

The tables below highlight both the student's strengths and needs for support and can be used:

- solo by either the student or one or more potential members of the supervisory team, or
- in collaboration by the student and the potential members of the supervisory team.

Part A Academic

Deep knowledge of theory	Published academic papers	High intellectual capability	Deep Research Knowledge	Extensive academic network
Little knowledge of theory	No academic papers	Untested intellectual capability	No research knowledge	No academic network

Part B Self-Management

Considerable life experience	Much energy and enthusiasm	Will sacrifice social life/family commitments	Strong project focus	Proven self manager	Fast timetable
Limited life experience	Limited energy and enthusiasm	Demanding social life/family commitments	No idea for project focus	No idea for project focus	No timetable

Part C Work and Domestic Circumstances

Using work focus	Extensive practice network	Limited employment demands	Close to university	High emotional support
No network with study participants	No practice network	High employment demands	Based in another country	Isolated

A2.2 Probing academic background and potential

Questions to Consider	Commentary
What is the prospective candidate's academic background?	Normally, you would expect to see an equivalent to a minimum of a 70% (distinction) average in the prospective candidate's highest level of academic study relevant to the field of research. To be competitive in a scholarship process and/or to be considered to be of high academic merit, you would normally expect a first class honours/high distinction or upper second class level of academic performance.
Is their background (knowledge and skills) in the area proposed for the research of sufficient breadth and depth to equip them for success in the research degree program they have applied for?	Consider both academic and non-academic background, networks and achievements
Do the prospective candidate's academic results suggest they have the capacity to work successfully at the level required in their research degree?	If the prospective candidate's academic background has involved studies outside of Australia, it is important to be carefully benchmark and assess the transcripts in relation to the equivalent Australian standards to see whether the results in foreign universities equate to your institution's minimum academic entry requirement for the research degree.
What do referees say about the prospective candidate's academic capabilities and potential?	Remember that a confidential reference carries far more weight than an open one. It is particularly important to look for high level of academic performance in areas: directly related to the research topic, and/or where the nature of the knowledge and skills required provide evidence of academic potential that is translatable to the research level of studies.

A2.3 Probing research experience and capacity

Questions to Consider	Commentary
Has the prospective candidate had any prior experience in designing and/or conducting research that is relevant to their proposed research field? If so, was this through a structured research training program or through work experience or via a combination of the two?	An Honours or Master minor thesis level experience of research would be normally considered the minimum acceptable level for entry to a doctoral level research program. By contrast, a prospective candidate for entry into a Masters by research program would not necessarily be expected to have any substantial prior research experience. In those cases, institutions and potential supervisors need to consider evidence regarding performance in research-related activities, such as undergraduate projects, summer internships or work-based projects
What role has the prospective candidate played in the research project/s?	Equivalence can be considered in terms of involvement in the design, development and completion of a research project outside of an academic program, if the outcomes generated demonstrate equivalent standard to honours or Masters minor thesis work.
Have you reviewed a sample of the prospective candidate's previous research outcomes to evaluate its quality?	
For doctoral level: Does the academic performance in this initial research training suggest academic and research capacity to work at the doctoral level?	
What have been the outcomes of this research experience?	Publication of a refereed research article or a report in which the prospective candidate has been the lead or one of the main authors is particularly valuable evidence of research potential.
What do referees say about the prospective candidate's research capabilities and potential?	Remember that a confidential reference carries far more weight than an open one

A2.4 Probing English language competence

Questions to Consider	Commentary
Has the prospective candidate met the University's minimum English language proficiency requirement?	While it is unwise to make judgements about the academic potential of a prospective candidate based primarily on the quality of their English, it is important to appreciate that the minimum English scores are determined as being sufficient for a prospective candidate to commence in a research degree. Australian universities normally require an overall band score of 6.5 to 7 in IELTS and also may stipulate minimum band scores for specific sub-skills (e.g. a minimum of 6.0 for Writing is usually required) for prospective research degree candidates who: • are non-native English speakers, and • have not recently studied in an English language intensive environment. TOEFL or other language proficiency tests where equivalences to IELTS have been determined and published may also be accepted. Some institutions set their minimum English requirement university-wide, whilst others may distinguish between disciplines and require a higher overall score for more linguistically demanding disciplines, such as the Humanities and Social Sciences
Where results of an English proficiency test (e.g. IELTS or TOEFL) are available, what does their proficiency profile suggest about areas of strength and weakness in English?	Knowing the prospective candidate's English proficiency profile enables you to identify the appropriate development and support strategies that need to be implemented, if the candidate's application is accepted.
Are there other institutional support programs and services to assist with the required English language and writing skills development for research?	Tuition and support to further develop English competence is required in many cases. The development of English language and writing competence is an ongoing lifelong process, whether the student is a native or non-native speaker.

A2.5 Probing the research project's feasibility and fit

In some disciplines, it is common for a prospective principal supervisor to provide a prospective candidate with the initial concept for a project. This approach helps ensure:

- the candidate's project interfaces well with the research group's broader program of research, and
- the supervisors have the capacity to provide appropriate expertise to support the project.

In many other fields (e.g. humanities and social sciences) and cases, the prospective candidate is usually expected to develop their own initial research proposal. This initial proposal may be developed in a context, where the prospective candidate:

- has not had good access to current literature, and
- may not have been fully aware of recent advances in the field of the research.

In such circumstances, it is important not to get too preoccupied with the specific details in what is proposed when assessing the initial research proposal. Once the candidate is accepted and the process of developing the more detailed proposal commences, there may be some changes in the focus and approach

Questions to Consider	Commentary
Does the proposed research have the potential to be developed into a detailed research proposal, which can lead to a viable project with outcomes satisfying the requirements for the degree? What bodies of knowledge form the basis of the research question/s?	Consider whether the broad topic area has the potential to enable the candidate under your guidance to develop a detailed candidature proposal for a project for the research degree level?
Does the proposal provide evidence of intellectual curiosity, passion for the proposed research area and a capacity to identify and contextualise a research problem? Is there evidence of the building blocks that should enable this person to develop into a competent researcher?	Consider the person proposing to undertake the project
What research methodology (qualitative or quantitative) is it proposed that the prospective candidate will use and why?	Consider whether the proposed methodology is: • reasonable and appropriate, and • familiar to your research community.
Does the area proposed for the research complement or directly relate to the research of the research group or the broader group of researchers working in the discipline? Is there a critical mass of other researchers with whom the prospective candidate can interact?	This considers the student as a member of a research community

Questions to Consider	Commentary
What access to external organisations, industries or other sources or facilities will be required for the prospective candidate to undertake the research? Is there confidence that these can be arranged for the duration required? Does the institution have the internal facilities, infrastructure and funding that will be required for the research to be conducted?	These are resourcing issues
Will the prospective candidate be supported with an external scholarship?	If the prospective candidate is to be supported with an external scholarship, make sure that you are aware of any constraints that this may impose on making significant changes to the proposed project. Where external scholarship funding bodies are supporting a candidate so that they will be trained as a researcher in a specific field with knowledge of specific methodological techniques, any major changes in direction may need to be considered and approved by the funding body

A2.6 A weighted risk assessment

The initial feasibility and risk assessment of potential HDR candidates consists of identifying the factors that may affect a candidate's chance of completing their level of study successfully. Based on this assessment, the candidate may be accepted or advised of areas of potential risk even before they are allowed to enroll

As some of the relevant risk factors may be seen as more critical and predictive of success than others, it may be useful to use a weighted approach to calculate the amount of risk a candidate may face. The table below identifies several risk factors that should be considered and suggests possible weightings,

Factor	Suggested Weighting	Comments & Questions
Non-English speaking background	15	A candidate's command of English, particularly where it is a second-language, needs to be noted as past of a Feasibility and Risk Assessment. **Some points to consider** • International: Fee-paying or scholarship? • Domestic ESL Students • English language and writing skills? • Humanities vs. Sciences • IELTS? TOEFL? A true indicator? • NOOSR international qualifications assessment?
Entry qualifications	12	Previous qualifications can indicate the level at which the candidate currently stands in regards to research methods and writing. **Some questions to ask** • Honours - first or second class? • Verification of qualifications? • Masters by Coursework - should the supervisors ask to see thesis? • Research methods - Are they at the correct level? How can you check?
Fit with Faculty research focus	?	Many academics wish to focus their research activity and want to work with research students aligned with that focus. Other academics may welcome a candidate keen to pursue a new methodology or a unique field study because of the collaborative development this may engender. Faculty research directions and Research Centres may also determine which candidates are preferred to gain critical research mass in specific areas. **Some questions to ask** • Does the candidate focus match Faculty/Research Centre goals? • Are there staff with expertise aligned to the candidate's interests?

Factor	Suggested Weighting	Comments & Questions
Enrolment mode	5	The enrolment mode will indicate how much time the candidate expects to devote to his or her research. It may also indicate students who will need alternative supervision arrangements (e.g. a remote student) **Some questions to ask** • On-campus or off-campus study? • Full-time or part-time study?
Financial status	8	Candidates may struggle to balance paid work with study. **Some questions to ask** • Any scholarship funding? • Is it enough? • Hours of paid work per week work? • Housing and transport? • Laptop and internet access?
Institutional support/ factors	5	The level of support offered to the HDR candidate by their institution can impact greatly on the chances of completion. **Some questions to ask** Will the candidate have adequate access to suitable: • induction programs - Process for welcoming and establishing domestic and international students? Late arrivals? • bridging and training courses for language, methods, software etc.? • research and writing consultants? • accurate and reliable information? • research climate and culture?
Other	?	Ask about: • student's family pressures, • student's motivation for enrolling, • student's previous success in study/jobs/projects undertaken, and • the fit between supervisor practices and the student's learning styles **And more**

Remember:
Choice of an appropriate supervisory panel can minimise the risk of an enrolled student failing to complete the research degree.

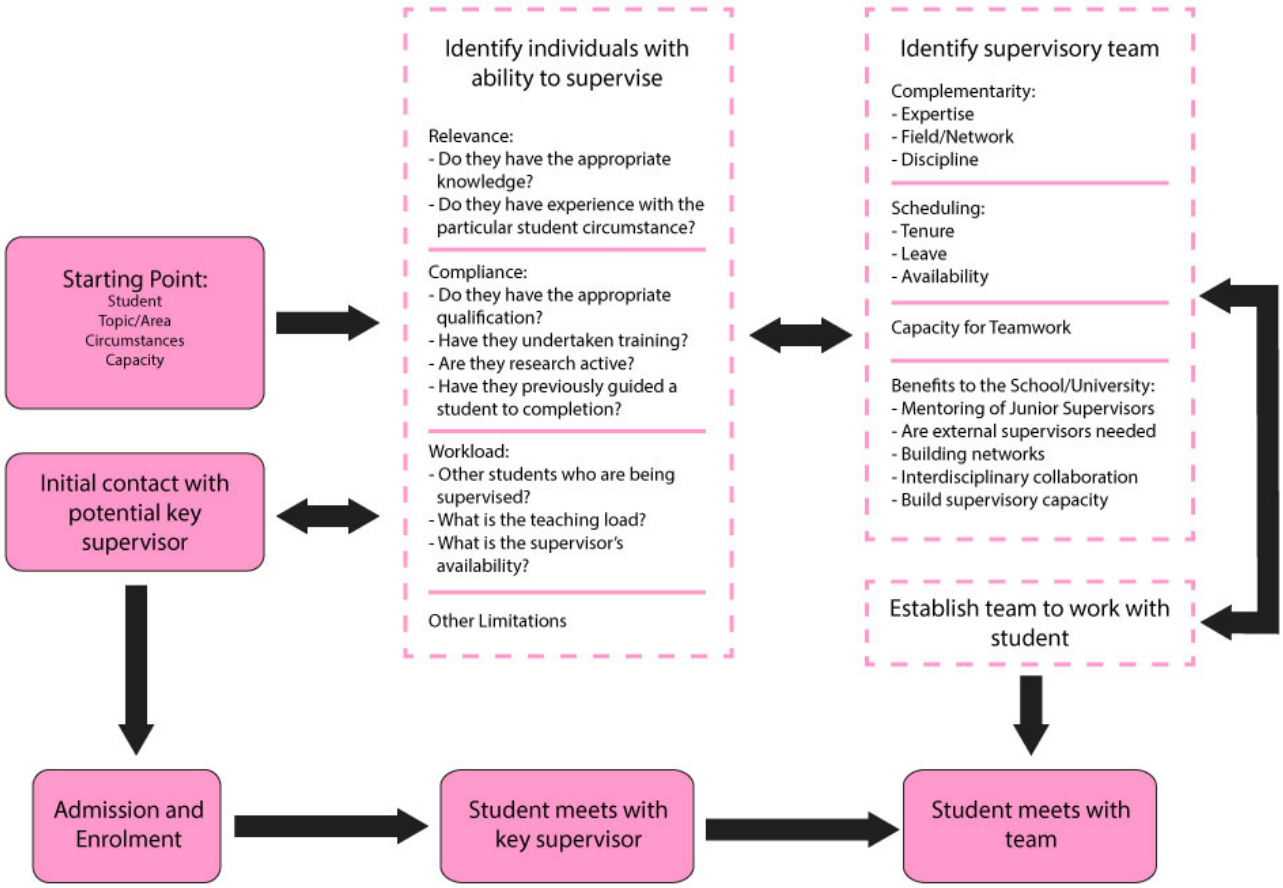
A3.1 Screening potential members of supervisory team

Appropriate supervision is considered to be one of, if not the most important factor for HDR completions. The University must therefore decide whether:

- the topic proposed for the thesis is aligned with research priorities,
- the allocation of students to supervisors can be used to build research supervision capacity,
- suitable research supervision capacity is available from staff, who comply with institutional requirements for leadership or membership of a supervisory team, and
- forming teams for supervision can develop or generate academic research relationships.

Issues of expertise, capacity, workload and current and future research and leadership roles all need consideration Specific topics and methodologies may require a blend of supervision capability. Challenging students or distant students may require greater supervision considerations. Novice supervisors may benefit from experienced mentors.

Many of these issues can be incorporated in a decision-making process for the allocation of supervisors for HDR students.



The table below can be used as an initial screening tool for potential members of supervisory team.

Topic	Questions to Consider	Commentary
Expertise of this potential team member	What expertise (subject area, the methodology, the context/ industry within which the research is set, writing, project management, understanding of cultural differences or other expertise) makes this proposed supervisor a suitable for the proposed project?	Each member of the team needs to feel confident about having knowledge and expertise that can be imparted as part of the supervision of a prospective candidate
Any need for specific complementary expertise from within or beyond the team?	If there are aspects of the project for which this proposed supervisor doesn't have direct expertise, can this expertise be accessed through including others in the supervisory team or via other experts in the research group, school/college or university?	Try to ensure good capacity across the supervisory team and their networks to ensure that the student gets access to the required range of expertise
Synergies with the prospective candidate's research	How well will helping to supervise this prospective candidate complement this prospective supervisor's own research agenda and program?	It is important to consider the synergies of the prospective candidate's project with each supervisor's research interests and theoretical and/or methodological paradigms. Mismatches can be very frustrating for both supervisors and candidates. Consider: **either** being proactive upfront in the initial project negotiation phase in suggesting the direction for the project, **and/or** trying to encourage as strong an alignment as you can between a candidate-initiated project and a particular supervisor's methodological interests.

After using these screening criteria, you can proceed to consider matters such as:

- the potential supervisor's capacity to supervise yet another student,
- potential mentoring arrangements within the proposed supervisory team,
- compatibility with other members of the proposed supervisory team, and
- workload allocation.

A3.2 Supervising work colleagues – issues to consider

There is a long tradition of HDR students taking on tutorial and lecturing work while undertaking their research degree. While this may be financially advantageous for some students, it does introduce additional issues that should be considered. Not only does initial involvement in teaching often dramatically slow thesis progress, it also and perhaps even more importantly introduces additional power relationships into the supervision process.

There are a number of issues for both parties to consider:

- Academics embarking on a HDR path should consider the advantages of a thesis by publication.
- Will being both a mentor and an academic manager be good for the student and the supervisor? Some universities have policies to prevent such relations.
- Cementing local relations through being both an HDR student and a working colleague has advantages for a School, but may lead to a double loss in period of downsizing.
- If either the teaching role or the thesis study has to be terminated, how will this impact the remaining relationship?
- Where there has been a pre-existing power relationship between supervisor and student, that relationship may well extend far into the future.
- Students may find it easier to choose a supervisor from academic staff they know well, than to take a more random choice at another institution.
- Would it be preferable to develop two separate networks, one as a student and one as an academic employee at different universities?
- Having access to two knowledge infrastructures may be an advantage and open up opportunities for collaborative production in the future.
- It is complex to develop and maintain two sets of relationships and negotiate the peculiarities of two universities and their infrastructure.
- Being a student at one institution and an academic at another may engender conflicts of interest.

A3.3 Assessing potential supervisory teams

As supervision arrangements can build both the student's and the school's research capability, consider carefully how you build a supervisory team and which supervisory teams you agree to join.

Use the table below as a reminder of some of the key factors to be considered.

Factor	Comments and questions
Supervisor compliance	• Will at least one member of the supervisory team comply with the institutional requirements for a principal supervisor? • Will all members comply with mandatory requirements for supervisors?
Supervisor expertise	• Any previous experience of successful HDR completions? • Any particular expertise regarding relevant research and research methods? • Any particular expertise in understanding cultural differences?
Supervisor availability	• Enough time? • Number of candidates currently being supervised? • Other commitments? • Workload compensations - 1 hour/week?
Capacity/career building	• Any novice supervisors who require completions to comply with the institutional requirements for a principal supervisor?
Supervisor compatibility	• Can the proposed set of supervisors reasonably be expected to work as a team? • Any conflicting interests?

A3.4 Canvassing potential supervisory team members

Academics new to an institution or new to HDR supervision need to generate some PhD students to supervise and build relationships with others to be invited on to supervisory teams. This poses a greater challenge for inexperienced supervisors, than for experienced supervisors.

This challenge can often be heighted where responsibility for selecting and co-ordinating the supervisory team for a new PhD student rests with the principal supervisor. Not surprisingly, principal supervisors seeking to set up a supervision team quickly and easily often only approach people they know well or teach with already. Failure to consider a wider pool of potential supervisors can, however, result in a less than optimal team for the candidate and pose difficulties later on.

When canvassing potential supervisory team members, considered whether certain supervisors are being:

- excluded from the supervisory process by more experienced colleagues, so they are the 'token' supervisor in an area,
- overburdened with work, while more experienced colleagues take a less active role but greater share of the workload,
- intimidated into feeling they cannot speak up in meetings with the candidate, or
- intimidated into feeling they cannot express any views differing from those of the principal supervisor.

Consider using the three agenda items listed below to:

- ground any conversations between the principal supervisor and other potential supervisory team members, and
- help potential supervisors consider whether or not to join a supervisory team.

Agenda item 1. What specific areas of expertise does the team need to bring to the supervisory process?

(e.g. does the team need expertise in the subject area, the methodology, the context/industry within which the research is set, or some other form of expertise such as an understanding of cultural differences?)

List the necessary skills and expertise.

Agenda item 2. What areas of expertise can specific potential supervisors contribute to the supervisory process?

Highlight the specific expertise and skills that you can bring to this particular student's supervision and what it is that you require others to bring.

Map this expertise and skills against the potential members of the team to ensure that everything is covered.

Myself	Potential Team Member 1	Potential Team Member 2
List the areas of expertise and skills that you will be bringing to this student's candidature	List the areas this person can bring to the team	List the areas this person can bring to the team

Talk to and map all the potential supervisory team members needed to ensure you can form a team with the correct mix of expertise and skills.

Agenda item 3. Other matters relating to the potential for effective teamwork
Discuss matters (such as those tabled below) that are likely to influence how effectively potential supervisors can work together as a supervisory team for that specific student.

Issues	Considerations
Philosophy and practice of supervision	There are many styles of supervision from those who only like to respond to written work submitted, to those who prefer to have conceptual conversations, leaving the detail to other members of the team. Have a discussion with the potential team members about how they like to supervise, noting what they are prepared to undertake in terms of workload and what they will be expecting from you. For example: Will you all attend every tutorial meeting? Who will respond to written work submitted for review and in what timeframe?
Support and personal development	Discuss whether and how more experienced supervisors are prepared to support you in your personal development as a supervisor. Are they prepared to mentor you while working with you as a team member? Will you, for example, have review meetings after supervision meetings with the candidate to discuss the supervision process and how the supervision meeting went?
Workload allocation	Many universities allow a certain number of hours for the supervision process per candidate per year, but may leave it up to the team to decide how they split these hours between them. Make sure you are clear with the team about the workload allocation they will each be getting, so that this does not become a source of conflict later on. Be realistic about how much you want them to do within the time they are allocated for supervision.

B. Setting expectations

Introduction

Once a candidate has been selected and allocated a supervisor, the next stage of the process is the induction of the candidate by the University and the initial supervisor meeting. The supervisor outlines the expectations for the HDR process and the Supervisor-Candidate relationship. To avoid confusion and conflict occurring later on, it is important to make all expectations clear at the very start of the HDR process. This is a mutual process and true for both the supervisors and the candidate.

This initial contracting stage must take appropriate account of available meeting, communications and support options and cover the following areas:

- assessing learning needs,
- agreeing initial expectations, and
- formalising the candidate/supervisor panel agreement.

Assessing the student's learning needs

The diversity of the Australian population and the increasing number of international students means HDR supervisors will be confronted with expectations, realities and challenges that they have not faced themselves. Candidates may have specific needs based on culture and beliefs, physical and cognitive ability, and their personal situations. Some candidates face challenges of isolation, language difficulties, culture shock, competing priorities, and accessing appropriate training, facilities and resources.

Supervisors should be aware of a candidate's needs and circumstances and endeavour to provide a satisfactory supervisory experience, which may need to accommodate a substantial pastoral role. Being aware of the relevant institutional support systems enables supervisors to refer students to knowledgeable and experienced student support staff.

The start of the relationship is a good time to carry out a review of the skills the student may need to acquire and the learning they would like to achieve during the candidature. Such an audit can identify and guide training and professional development required. Candidates can then be referred to the wide range of support and training that is freely available during the academic year.

Agreeing initial expectations

Both candidates and supervisors come to the HDR process with a set of predefined expectations based on factors largely linked with previous experiences. For the candidate, these can stem from their time in university as an undergraduate student or from previous research degrees undertaken, and advice from other HDR candidates. Supervisors, on the other hand, may have a set style of supervision and will form expectations based on what they have experienced with previous candidates they have supervised. Each candidate and supervisor is different, and there may not be a clear match in terms of expectations.

These initial expectations need to be outlined and dealt with as early as possible, so that all involved are clear on what needs to be done, and by whom.

The candidate/supervisor panel agreement

As HDR Candidates and their supervisor(s) align their expectations by discussing and reaching agreements, it may be beneficial to record such agreements in a document that can be used to monitor future progress. An agreed timeline for the project may also form part of the document. The

document can also serve as:

- a guide to tracking the candidate's progress, along with a detailed Project Plan containing a timeline and a record of milestones for the project, and
- the focal point for review at the close of each semester when candidates and supervisors meet to discuss progress.

Such a document may record how the relationship will work in terms of:

- regular contacts between the individuals, the methods used and the time allocated, and
- the type, quality and timing of feedback: Setting out the rules for feedback can make the student more confident of receiving adequate responses to any work submitted and help the candidate to engage more with the HDR process.

While each contract needs to be tailored to the individual candidate's needs and capabilities, experience of both successful and unsuccessful HDR candidatures suggests the following critical issues may need to be addressed in developing an effective candidate/supervisor panel agreement:

- completion rates are low for candidates, who do more than 30 hours of paid work per week,
- candidates with scholarships are more likely to complete,
- candidates based on campus with ready access to desk space and a computer are twice as likely to complete than other candidates,
- candidates who have supervisor meetings once a week are more likely to complete,
- projects should be defined early on during the candidature, and
- candidates should be encouraged to write early.

Where a supervisory panel has been formed, it may be useful for the panel to similarly agree an agenda for supervision detailing roles and communication patterns.

Tools

As shown below, this component has several subcomponents with their own specific tools. Many of these tools can also prove relevant and helpful later in the research journey.

Subcomponent	Relevant Tool
B1. Considering meeting, communications and support options These tools: • explore and develop how communication between the student and supervisor(s) will be managed • suggest how agreements can be recorded • encourage exploration of new methods of communication (see also: Module 3 of GRIP)	B1.1 Student support networks B1.2 Frequency of meetings with the student B1.3 Meeting purposes, processes and records B1.4 Meetings/contact with candidates who are rarely or never on-campus B1.5 Using new technology to contact on-campus and off-campus students B1.6 Communication options for supervision B1.7 Exploring how best to provide feedback B1.8 Addressing cases where communication is not working

Subcomponent	Relevant Tool
B2. Beginning the journey These tools: • support both analysing and auditing capability, • explore what the student brings to the candidature, • explore the skills and knowledge the student needs or hopes to learn, and • assist in planning a development program (see also: Module 2 of GRIP)	B2.1 Student skills assessment B2.2 Action plan for skills development B2.3 Linking the student to the research community B2.4 Beginning to focus the research journey B2.5 Considering a thesis with publication
B3. Formalising arrangements within the supervisory team These tools provide supervisory teams with templates and guides that can be: • used to open discussions about how the team will operate, and • shared as an agreed agenda for the team supervision	B3.1 Considering supervisory team options for workload sharing B3.2 Considering supervisory team issues and good practices B3.3 Supporting workload sharing B3.4 Formalising agreement on team workloads and roles B3.5 Remuneration options for external supervisors
B4. Student-supervisor boundaries and agreements These tools support and develop the initial process of exploring: • what the candidature will entail, • how it will be jointly managed, and • how it will be recorded for monitoring purposes	B4.1 Considering student-supervisor boundaries B4.2 Checklist for student-supervisor boundaries B4.3 Probing and clarifying candidate-supervisor boundaries B4.4 Documenting student/candidate-supervisor agreements

B1.1 Student support networks

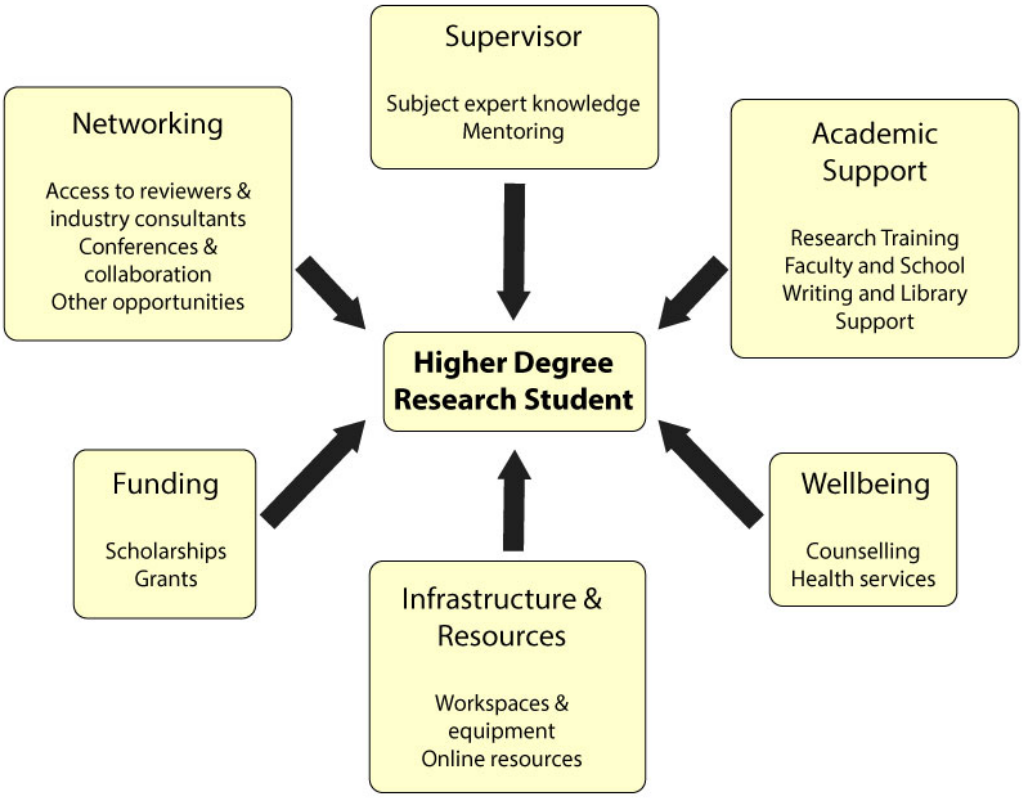
Tailored support is required to cater appropriately for:

- part-time mid-career candidates with extensive work demands,
- candidates with immediate family commitments,
- candidates with limited access to supporting and collegial student networks on campus,
- candidates with often separated from infrastructure – library, space, technology, and
- candidates needing greater motivation and passion to overcome their social isolation

Step I. Customise that diagram below to reflect the relevant student support services within your faculty and school. Note that the diagram elements can be grouped around topics/themes (e.g. funding, space & resources, academic support, student milestones, personal development, writing/ library assistance, English language support, etc.) to help to show up any gaps.

Consider:

- What access to equipment, study space, computer/software, access to email and funds is available to the candidate from the School?
- Which research centre would be most closely affiliated with this research?
- What services/resources can Graduate Research School offer?
- What services/resources can Office of Research & Innovation offer?
- What services/resources can the Faculty offer?
- What other services are available from the University?



Note that this diagram is intended to give an idea of the more generic areas of support and can also include more specific support services such as research netowrks, the Forum of Postgraduate Students (FOPS), the GRS Google Group, English as an Additional Language workshops etc.

Step 2. Further customise that diagram to reflect the support available and relevant to a specific student or specific groups of students (e.g. on-campus and off-campus students, local and international students).

Step 3. Consider how accessible, useful and appealing those services are to a specific student or specific groups of students (e.g. on-campus and off-campus students, local and international students).

Step 4. As appropriate, contact the providers of each of these services and ask:

- whether and how supervisors of HDR students can use or make referrals to these student support services,
- whether and how their service caters for particular groups of HDR students (e.g. on-campus and off-campus students, local and international students),
- whether and how their service could be changed to make it equally as appealing and useful to all those student groups, and
- whether they know of any other relevant support services available to HDR students that should be added to your checklist.

B1.2 Frequency of meetings with the student

There is no right or wrong answer as to how often to meet your HDR students. Some supervisors like to meet their full-time HDR students on a weekly basis. Others consider this too much, arguing that as the research degree is supposed to be about developing an independent researcher, an on-going practice of weekly meetings could lead to a heightened sense of dependency, rather than to independence.

Do you agree with guidance offered in the table below regarding the frequency of meetings with the student?

Stage of PhD	Issue being encountered	Recommended frequency of meeting and agenda
Newly enrolled candidate	Refining research question	Weekly or fortnightly to explore areas to be expanded in reading around the question and helping to define the boundaries
Candidate exploring literature	Making sense of the literature	Fortnightly to monthly to keep track of progress and help the student find links between strands of literature to develop conceptual framework.
Candidate exploring methodology	Misunderstanding of methodological approaches	Fortnightly to guide exploration and piloting of methods, ensuring ethics is adhered to.
Data collection phase	Adherence to ethics and rigour in data collection	Monthly to ensure practice is ongoing within ethics boundaries
Analysis of data	Interpreting data	Fortnightly initially to ensure candidate is finding strands in the data and undertaking a methodologically sound approach, then monthly to ensure progress
Writing up	Difficulty in writing	Weekly to monthly depending on how easy the candidate is finding the writing process. If they are struggling, review segments regularly to help them develop a style. If they are doing fine, meet monthly to review a chapter per month.
Slow progress	Candidate not really progressing	Increase frequency of meetings to ensure candidate is managing their time and progressing their work rather than prevaricating.
On retreat	Candidate needs space to think and write	Given them the space with clear boundaries of what they should be seeking to achieve and when to contact you.

Do you agree that:

- there are likely to be times when the candidate is struggling and needs to meet more often, and times when they are happily beavering away on their research and simply need spot-checks to ensure they are not veering off track,
- a monthly meeting is always worth having if only to check that the student is progressing through the work. They should be able to demonstrate a month's worth of progress,
- if agreed pre-work is not handed in on time, the supervisor should cancel the supervision meeting. Unless there is some evidence of progress, there is nothing to discuss, and
- having a clear agenda for the supervision meeting is almost more important than having frequent meetings.

B1.3 Meeting purposes, processes and records

Regular contact and formal meetings are the cornerstone of supervision throughout the research project. Whether face-to-face or virtual, these meetings should be structured, with an agenda prepared for each meeting, usually led by the candidate. Wherever possible, supervisors should allow the candidate to take ownership of the project, and any decisions made during meetings should be a result of mutual agreement after discussion.

The usual purpose of face-to-face meetings is specifically to ensure that the candidate is on track to meet agreed milestones and is progressing according to the agreed thesis plan. The meetings serve as a platform for feedback on project work as well as written work, and can be used to explore how valuable changes to the structure or new ventures may be to the study.

During data collection and fieldwork, the student may require guidance about barriers and options that unexpectedly confront the agreed plan. The supervisor is expected to comment on both the content and structure of the candidate's work and provide clear, effective feedback. This includes:

- discussing possible directions for the candidate to take in terms of their research,
- encouraging the candidate to look at any data gathered critically, and
- reminding the candidate about the focus of the research work.

The last task in any meeting is to set a date for the next meeting. Unless there are extraordinary circumstances, all attempts should be made to adhere any regular day and time set out in the current Student/candidate-Supervisor agreement.

A record of all meetings should be made for future reference, so any actions agreed on can be followed up at subsequent meetings. Decisions, achievements and future actions should be recorded and kept on file. It may also be useful to take short notes have a dedicated book throughout the meetings and for a formal record on final decisions to be typed up later or confirmed by email.

Consider:
What other issues regarding meeting and contact purposes, processes and records need to be discussed with the student and other members of the supervisory team?

B1.4 Meetings/contact with candidates who are rarely or never on-campus

Giving feedback is a key component of the supervisor role. Done well, this will guide the student and tMany supervisors find it challenging to supervise candidates, who are rarely or never on campus. Universities often have specific guidelines and rules regulating such supervisory relationships and may insist on minimum periods of contact during the candidature.

Supervisors should review the characteristics of their remote HDR candidates, so they can see what can be done to replicate the normal relations virtually and to develop relational networks of support close to the student location. Supervisors should consider how:

- the student may access other facilities and networks to replace the campus facilities they are unable to access, and
- new technologies can be used to close the distance gap.

Consider:

What other issues regarding meetings and contacts need to be discussed with the student and other members of the supervisory team candidates who are rarely or never on-campus?

B1.5 Using new technology to contact on-campus and off-campus students

Both the student management process and the research process can benefit from a range of new technologies. Communication technologies that free the candidate and the supervisor from the physical confines of the university, and allow them to be more active and mobile in their relationship can provide support for the supervision process and serve as a research tool. These technologies do not replace conventional methods of meeting or research, but augment them in different ways. For instance, while supervisors often generate templates and keep a hard copy record of candidature progress, it is also possible and often more productive to use an electronic record, one that may be shared by the students on Pebble Pad or a similar data storage site. Face-to-face meetings between supervisors and students can be interspersed with email discussions, Skype meeting and feedback returned on written work.

Supervisors should therefore consider exploring new technologies such as:

- Adobe Connect Pro and Skype as a means of communicating,
- voice files rather than Word documents for sending immediate thoughts,
- Camtasia for recorded instructions,
- cloud document spaces for storing active documents,
- smart pens (LiveScribe), and
- other devices, such as smart phones and tablets.

Consider:

What other issues regarding communication technologies need to be discussed with the student and other members of the supervisory team?

B1.6 Communication options for supervision

This tool provides criteria that students and their supervisors can use to:

- explore the full range of communication options available to them when they cannot meet face-to-face, and
- select effective options for communication.

In light of the nature of the research project, its location, the student's background and mode of study (e.g. on or off campus), the stage reached in the research (e.g. experimental, library research, writing up, etc.) and the other commitments/needs of both supervisor(s) and student, use the following criteria to select effective options for communication and reach a mutual agreement on the most appropriate methods of communication:

- Cost
- Availability
- Compatibility?
- Time shift/ zones
- Synchronicity
- Immediacy
- Audit trail
- Stage in project
- Value for nonverbal communication (i.e. body language/ attitudinal cues)
- Other demands/ commitments
- Effectiveness given the nature of the material to be discussed
- and probably more.....

Method	Advantages	Disadvantages
Email		
SMS		
Telephone		
Teleconference		
Webinar		
Skype audio		
Skype video		
Facebook		
Second Life		
Google Docs		
Ning		
Post		
Other?		

B1.7 Exploring how best to provide feedback

Giving feedback is a key component of the supervisor role. Done well, this will guide the student and they will be free to manage their study with an enhanced input. Done poorly it will be resisted, ignored or server to confuse the study direction.

Consider the following guidelines when giving feedback:

- Comment on positives
  Whenever possible, try to give some (genuine) positive feedback – it makes the negative easier to bear.
- Be specific and clear
  For instance, "I think that the draft you've given me needs more thorough editing here, and here", rather than "Your writing is really shoddy."
- Own the statement
  Use 'I' statements rather than 'you' statements, e.g. "I find your description confusing" rather than "you sound confused here".
- Don't wait
  Immediate feedback is the most valuable. If this is not possible, give it as soon as you can.
- Offer constructive ideas
  For instance, "That would read better if you wrote xxxx instead of yyyy."
- Ask the student what feedback they want
  Some students want a general critique, while others want more direction.

Can you suggest changes to these guidelines? What would change and why?
Which are the most appropriate communication tools to use when giving feedback and why?

B1.8 Addressing cases where communication is not working

What support can you suggest for the following cases where communication between the student and the supervisor team appears unsatisfactory?

Case	Description
Silent student	The student does not respond to emails, phone calls, letters or other attempts at contact by members of the supervisory team
Silent supervisor(s)	No member of the supervisory team attempts to make contact with the student
Isolated student	Despite receiving emails, phone calls, letters or other forms of contact from members of the supervisory team, the student frequently reports feelings of isolation
Virtual worlds	The student wants all contact with the supervisory team to take place in Second Life
Language	English is not serving as an effective common language between student and the supervisory team and the student has great difficulty with written and /or spoken Academic English
Preferred learning media	The student and members of the supervisory team have quite different preferences regarding learning media

B2.1 Student skills assessment

Look at the matrix below, perhaps in conjunction with your student, and mark the appropriate boxes to indicate the student's current capability. Ask yourself what questions and evidence shape your perceptions?

Possible Skill Needs	What is the evidence?	What could be the development path?
Self management		
Ethical knowledge		
Academic literature knowledge		
Literature review		
Text scanning capability		
Critical thinking (Bloom)		
Narrative skills		
Writing capability		
IT network skills		
Advanced word processing		
Document management		
Research methods		
Instrument design		
Analysis		
Presentation		
Networking skills		
Academic network		
Employment network		
Publishing skills		

B2.2 Action plan for skills development

Use the customisable table below to document a definite plan for the action to develop the relevant skills to the required level

Current Skills In	Score*	How will the student improve these skills?	When will the training/ skills development occur?
Research & Professional Skills			
Literature Review Skills			
Appropriate Research Methods: • Qualitative • Quantitative • Mixed Methods • Practice-Led/Based • etc			
Academic writing skills			
Publishing Skills			
Writing skills, reading skills, verbal skills			
Project planning, managing time, setting agendas and completing tasks			
Critical thinking, problem solving, analytical skills			
Library skills, bibliography, referencing, EndNote, etc.			
Presentation and communication skills			
Using IT research software applications for data analysis, referencing, formatting, publishing, etc.			
English as an Additional Language (where needed)			
Other Professional skills?			
Other?			
Career Development			
Networking & Self Marketing			
Action plans for Goal Setting			
CV & ePortfolio development			
Interview skills			
Job searching skills			
Writing selection criteria			
Other?			

* Scale: 1 = need to develop, 2 = some familiarity, 3 feeling confident, 4 = well developed

B2.3 Linking the student to the research community

Supervisors should ensure from the start that students:

- are aware of the range of support that is available to them,
- have located and enrolled in the library,
- have gained a workstation area,
- have met the staff involved in supporting and providing seminars for research students at the University and faculty levels, and
- are encouraged to be on the mailing lists of all the entities that may send out useful invitations for relevant learning experiences.

Early discussions may also suggest a programme that includes:

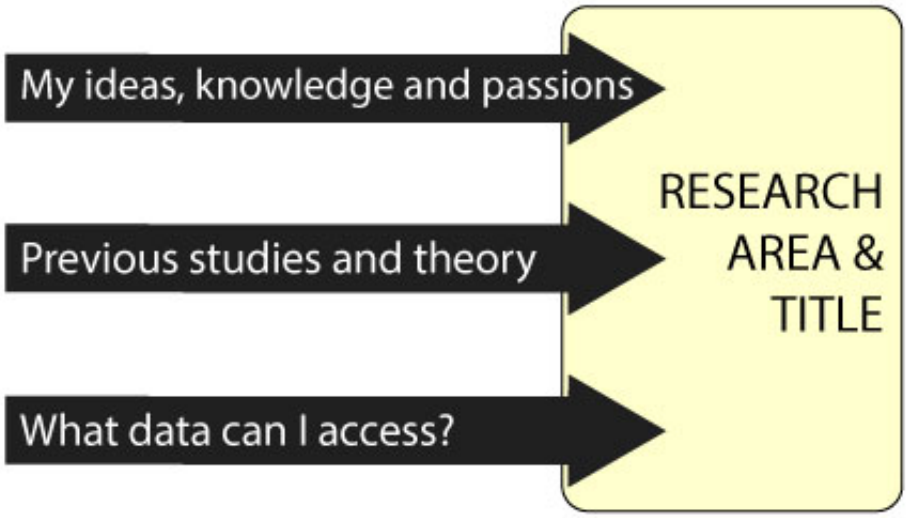
- reading a Sample Thesis in the area,
- familiarising themselves with some of their supervisors' publications,
- scanning relevant journals in the area(s),
- reviewing new publications in the area, and
- setting a time line for all major activity.

B2.4 Beginning to focus the research journey

Students may have an idea about what they are interested exploring. Without a passion, they will not sustain the long journey ahead, but it is important to indicate clearly that gaining a PhD is about making a contribution to knowledge. They will need to convince three people you have done enough, know the academic field, and made a contribution to conceptual knowledge.

So, where should their plan start? It starts with finding out what has been done before, so we don't duplicate, but can explore new territory. Students have to become conversant with what is known and how it can be developed. Often, they may arrive with a good question about current issue. However a great plan needs a reality check – can you get the required data and who will give it to you, or give you access to the data?

The following figure can serve as a basis for early discussions to centre the search for a focus and title.



1. What is the direction of the study?

The student may have the broad idea of what needs to be explored – but what are the questions that are being asked, and what are the issues that are not being solved. What studies will strike a chord with others in the field and society at large?

2. What are you building from?

Search existing HDRs and articles to find out what theories or conceptual frames and methods are being used. It surprising how much comment there is out there and how little evidence based research!

3. How will you get access?

What types of data does this research aim to collect? How will this data help to answer the research questions? What networks will help get to best practice or the data needed? How can those networks be found and opened up? How can strategic sponsors be located at work, in academia, in the business world?

B2.5 Considering a PhD with publication

A PhD by publications may often be retrospective decision made when a high quality candidate is able to convert their early literature review or a unique conceptualisation into a publishable paper that disseminates new knowledge into the field. Issues of the subsequent data collection and analysis may produce further papers ,that may focus on a specific aspect of the investigation or period of the investigation.

The aim is that a PhD by publications (like the traditional PhD) makes a unique contribution to knowledge and form a cohesive contribution as a linked series of works. The papers are usually bookended by a substantial introductory context chapter outlining the rationale underlying the project and a conclusion that draws the value of the work together. The goal is that when the papers both stand on their own and also become far more than the sum of their parts when they are presented as a complete thesis. This approach is not an opportunity for an individual to take papers already produced and then compile them into a PhD.

The positive side to this approach is that it combines the twin aims of producing a thesis and publishing papers making it very attractive to early career academics, and their supervisors. The PhD journey is about personal development as well as thesis development and this route ensures the candidate completes with greater self-esteem, honed writing skills and equipped to handle the frustrations of editors and reviews. Few students gain any review of their progress after their proposal and this direction ensures continuous feedback. More importantly, a thesis that comprise of several peer-reviewed articles already establishes the academic credibility of the candidate. For those unsure of the future, each paper is a result in itself and breaks the long wait till a PhD is confirmed.

This is not a journey for all students and the following issues should be discussed:

- Does the student have the high level of writing skills necessary?
- Do they already have the ability to synthesise literature to a high level?
- Is the proposed study area interesting to several journals?
- Is the proposed study likely to produce new knowledge?
- Do they have the resilience to withstand review criticism?
- Do they have the ability to select the correct academic targets?
- Do they have the management skills to respond to reviews and editors?
- Do they have the ability to both produce complete papers and compile a broader thesis structure?
- Will refereed papers be an attractive incentive to this candidate?
- Can the proposed study be viewed as a series of phases or streams of investigation?

For more information see:

- Dr Denise Jackson, ECU – Completing a PhD by Publications
- http://patthomson.wordpress.com/2013/04/22/phd-by-publication-or-phd-and-publication-part-two/

B3.1 Considering supervisory team options for workload sharing

Supervisory teams can be implemented in different ways. This tool canvasses the advantages and disadvantages of some of the options for workload sharing in supervisory teams.

Using the judging criteria from the bulleted list, explore the advantages and disadvantages of each of the options for workload sharing in supervisory teams canvassed in the table below

Judging criteria

- Educational benefits
- Benefits to research community
- Availability
- Simplicity
- Compatibility
- Costs/resourcing
- Risk management
- Audit trail
- Other?

Options for workload sharing in supervisory teams	Advantages	Disadvantages
Solo supervisor		
Active principal supervisor		
with inactive associate supervisor		
Actual 80:20 team supervision		
50:50 team supervision		
Community/group supervision		
Other?		

B3.2 Considering supervisory team issues and good practices

Putting good practices into place early can prevent many of the problematic situations that reduce the effectiveness of supervisory teams.

Issues of concern in supervisory teams	Practices that contribute to making supervisory teams work effectively
• Workload not fairly shared/someone not pulling weight • Co-supervisor not reading work submitted by the HDR student or investing enough time/effort to address student needs • Members not sharing the same diligence in providing feedback or giving priority to doctoral students • Other workload issues	• The ability of the individuals to work together as team • Need to have shared responsibilities for work with the students
• Differing perspectives and inability to compromise, status/ego and power plays between supervisors (e.g. shared supervision as a competition) • Differences in supervisory philosophy, lack of understanding or respect for each other's expertise • Methodological conflicts	• Having complementary skills • e.g., content knowledge & methodological knowledge to offer • Different strengths and areas of expertise; appropriate spread of research topic knowledge across the team and willingness to share ideas and resources • Trust and respect in relationship e.g. the ability to have joint conversations regarding student progress can allow teams to suggest and debate a series of alternative approaches to issues as they arise • A common view of a good piece of research; a shared interest in the area
• Difficulties organizing meetings because either too busy (time) or cross-campus (place) • Supervisory teams who do not to meet to review their performance;	• The importance of regular joint meetings, pre-meeting to assess what might be needed
• Lack of role definition or token inclusion of a co-supervisor • Expectations not clearly spelt out to student and other supervisors	• Having clearly defined roles (See B3 Tools)
• When problems arise, it seems to be when a student is receiving conflicting individual rather than group feedback • Manipulative students need to be guided into not playing supervisors off one against the other	• Having a student focus, valuing the student, acting with integrity; having enthusiasm for the student's project and placing the needs of students first • Clear agreements negotiated with student as to a course of action agreed between all parties
• Members who do not read books on supervisory practice or use online resources or do not engage with existing Communities of Practice (CoP) (See H1 Tools)	• Supervisors with similar understanding of supervision or needs of doctoral students • Need to have shared understandings about what supervision involves • Discussion between supervisors about standards for dissertations

B3.3 Supporting workload sharing

What support can you suggest for sharing the workload in the following situations?

1. Managing changes to the composition of the supervisory team.
2. Managing conflict within supervisory teams.
3. Implementing and evaluating mentoring arrangements
4. e.g. do they comply with the ISMPE (International Standards for Mentoring Programmes in Employment at **http://www.ismpe.com**).
5. Negotiating and managing the required mix of on-campus and off-campus supervision.
6. Minimising mismatches between the student and the supervisory team regarding language skills, cultural knowledge, life skills and experiences (e.g. international study and migration).

B3.4 Formalising agreement on team workloads and roles

The following tables offer models for selecting the correct mix of skills for the Supervisor Panel and show how agreed workload and roles can differ for members of a supervisory panel.

Example 1

			Expertise			
Supervisor Title	Name	Load	Discipline Knowledge	Research Design	Rules & Deadlines	Mentoring
Principal	Dr X	70	x	x		x
Associate	Dr Z	30	x		x	

Example 2

			Expertise			
Supervisor Title	Name	Load	Discipline Knowledge	Research Design	Rules & Deadlines	Mentoring
Co-Principal	Dr X	50	x		x	
Co-Principal	Dr Z	50	x	x		x

Example 3

			Expertise			
Supervisor Title	Name	Load	Discipline Knowledge	Research Design	Rules & Deadlines	Mentoring
Principal	Dr X	50	x			x
Coordinating	Mr Y	10			x	
Associate 1	Dr Z	40		x		x

Example 4

			Expertise			
Supervisor Title	Name	Load	Discipline Knowledge	Research Design	Rules & Deadlines	Mentoring
Principal	Dr X	40	x			
Associate 1	Dr Z	40		x	x	x
Associate 2	Dr A	20		x		x

Example 5

			Expertise			
Supervisor Title	Name	Load	Discipline Knowledge	Research Design	Rules & Deadlines	Mentoring
Principal	Dr X	30		x		
Coordinating	Ms Y	10			x	x
Associate	Dr Z	20		x		
External	Dr J	40	x			

Remember:
Any negotiated agreement on sharing workload and roles may need to be renegotiated to address the changing needs and circumstances of the student or the members of the supervisory panel.

B3.5 Remuneration options for external supervisors

Adjunct, Honorary or Emeritus staff and persons external to a University may be:

- appointed as External Supervisors for the support of HDR candidates, and
- provided with remuneration for their supervisory contribution.

Options for appropriately remunerating any such supervisors external to an institution may need to be explored when forming appropriate supervisory panels for both on-campus and off-campus research students. This tool canvassing remuneration options for external supervisors can be:

- used to foster discussion at school and faculty and institutional level of effective supervisory teams appropriate to a particular student, given that student's circumstances and proposed research project, and
- incorporated within an institution's policies on supervision.

Users of this tool should customise it to reflect both the terminology and organisational entities within their own institutions.

Option 1. Non-remunerative appointment

An external supervisor may be appointed on a non-remunerative basis. Examples of non-remunerative arrangements would be where:

- members of a cross-institutional collaborative research team regularly engage in the associate supervision and support of research students within a project, regardless of the institution in which the student is formally enrolled, or
- there are long-standing cross-supervision arrangements between individuals, Schools or research areas at one or more institutions.

Whenever external supervision is conducted on a non-remunerative quid pro quo basis, the external supervisors are expected to meet the university's standards for supervisor registration, training and performance.

Option 2. Remunerative appointment

In these cases, supervisors are expected to meet the university's standards for supervisor registration, training, performance, duties and conduct in line with normal University policies and procedures. The appropriate School/Institute/Centre is responsible for ensuring that the external supervisor is given all of the relevant university policies and procedures.

The remuneration and payments for external supervisors may be linked to specific candidature milestones as shown in the table below.

Milestone	**Indicative % of total remuneration** (Actual % negotiated to take account of the supervisor, role and project)
Research proposal and literature review	25%
Ethics committee clearance	5%
Approximate midpoint of candidature	25%
Thesis submission for examination	30%
Thesis corrections and final approval	15%

The remuneration for external supervision should be negotiated between the Head of School/

Director of Institute/Centre and the external supervisor, with reference to the:

- academic level or equivalent of the external supervisor commensurate with the university's academic salary rates,
- roles and responsibilities of the external supervisor in relation to the project,
- proportion of overall supervision being undertaken, and
- institutional policy regarding appointment of emeritus, honorary, adjunct & visiting academic staff.

All arrangements for external supervision should be confirmed in writing, including the period of supervision, the contact model, payment schedule and maximum and minimum limits on payment.

B4.1 Considering student-supervisor boundaries

It is important to set clear guidelines and boundaries to the student – supervisor relationship at the start of the doctoral process. Ideally, you can do this prior to agreeing to supervise a student, so that you both enter into the relationship with a clear understanding of each other's expectations.

Some supervisors may have difficulty establishing the boundaries between:

- being friends with the supervised student,
- managing the supervised student,
- being the supervised student's boss, and
- being the supervised student's teacher or mentor.

Professor Laurence Hurst at the University of Bath reflects on how he views the role of the supervisor bridging a range of activities: **http://www.youtube.com/watch?v=rfmj-dAD6SQ&feature=related**

This video clip shows some supervisors reflecting on how they think the student can act to get the most benefit from supervision. **http://www.youtube.com/watch?v=po_UIRlLu0A&feature=endscreen&NR=1**

Supervisors generally believe that to get the most benefit from supervision meetings, the student needs to:

- be prepared for the supervision meeting,
- have done work in advance,
- set the meeting agenda and know what questions they want answered.

Do you share these beliefs? Do you have other ideas about how students can act to get the most benefit from supervision meetings?

Do you agree or disagree with the following statements:

Supervisors expect their students to be independent.
No supervisor wants a student whom they constantly have to guide and direct—who never takes the initiative to explore a promising line of inquiry, or who doesn't take the risk of reading outside a prescribed range of literature. Students are contributing something original and significant to knowledge. This requires original thinking on their part. It requires them to become independent researchers and thinkers. Supervisors are there to guide and advise—not to do students' research and thinking.

Supervisors expect their students to regularly produce written work.
Without written work, there is often little informed basis for discussion between supervisors and students. A common student complaint is that meeting after meeting with their supervisors seems to cover the same ground and often they are covering the same ground.

Supervisors can help students start to turn this around by:

- encouraging the supervised students to co-set the agenda, and
- expecting the supervised students to provide something in writing beforehand to form the basis of discussion. Initially, it might be a series of dot points, progressing to some analysis or elaboration of a theory, and eventually to complete chapters. This material should be submitted electronically at an agreed time before the meeting (e.g. three or five working days) before the meeting date) together with a list of questions or issues that the student wants to be covered in the meeting.

Supervisors expect to meet with their students regularly.
Most institutions mandate how often supervisors should meet with their students (and supervisors need to ensure they're aware of what is mandated)—in many places, it's once a fortnight. Of course, there's a need for flexibility. If the student is away on fieldwork, for instance, fortnightly meetings are impossible. At other times, it might be necessary to meet on a weekly basis, or even more frequently. But on average, it should balance out to what the institution mandates.

Supervisors expect their research students to be honest when reporting on their thesis.
This means that students won't convey misleading impressions about what they do or don't understand, or what reading they're doing. If, for example, the supervisor suggests that they might want to consider Foucault in a particular chapter and the student is nodding approvingly, the impression they're conveying is that they know what the supervisor is talking about. But if they've never even heard of Foucault, they're unwittingly being dishonest with their supervisor. They might leave the meeting not even knowing how to spell Foucault ('Phooco'—is it a Chinese philosophy?) and won't be able to locate anything in the library.

If they had stopped their supervisor at that point, admitted that they've never heard of Foucault, and asked for further guidance, their supervisor could have directed them to a particular text, such as The **Birth of the Clinic**, or to an introductory text such as Paul Rabinow's **The Foucault Reader**. There will be students who need to be 'given permission' by their supervisor to stop and ask for clarification or elaboration on points they do not fully understand.

Supervisors expect their students to follow the advice that they give, but not in any slavish, uncritical way.
When supervisors give students the benefit of their knowledge and advice, it's reasonable to expect the students to treat that knowledge and advice with due consideration and respect. Supervisors may, however, need to reassure their students that even though they should fully consider supervisors' suggestions, they are not obliged to adopt a particular position.

Let's say the supervisor had recommended that the student considers Foucault's **The Birth of the Clinic** in relation to a chapter they're working on. If at their next meeting, the supervisor asks how useful they found Foucault for their analysis and receives the reply, 'Oh, I didn't bother reading that—it all looked a bit heavy and boring', that reply is going to put a strain on the relationship. It will impact on the supervisor's commitment to be working with and for the student, with providing that student with the benefits of the supervisor's own knowledge.

The student-supervisor relationship will work much better if students are able to say for example that after reading the first couple of chapters, they realized that they didn't want to approach their chapter according to that framework. This tells their supervisor that:

- those students have come up with a critical insight into what they want to say, and
- acknowledges the role of the supervisor in their coming to that insight.

Supervisors expect their students to be excited about their work, able to surprise them and be fun to be with!
Some supervisors and students are puzzled by this expectation. But it's important! Students shouldn't underestimate the importance of getting their supervisor to be enthusiastic about what they are doing. After all, they are crossing boundaries and exploring something new. They ought to be excited themselves about what they are doing. If they're not, perhaps they need to have a look at what they're doing and why they're doing it. Supervisors should ensure that they raise the 'excitement factor' with their students every so often.

B4.2 Checklist for student-supervisor boundaries

Going through the following checklist can be helpful at the first supervision meeting with any new HDR student. It is also worthwhile to record the answers, so that you can review this initial agreement between both parties at some later point, such as when either party feel the student-supervisor relationship is no working effectively. Consider using this tool in combination with other B component tools.

Checklist for setting expectations

Issues	Questions
Frequency of meetings	• How often does the student expect to meet with you? • Do meetings always have to take place face to face or can they be by phone, Skype or email? • Who will call the meeting? • On what basis can meetings be cancelled?
Pre-work before supervision meetings	• What does the supervisor expect the student to do in terms of pre-work prior to a meeting? • What does the student expect from the supervisor? • What timeframes are required to make this happen • (e.g. if the student expects a supervisor to read work then agree on the length of work to be submitted regularly and on the number of days prior to the meeting that it needs to be submitted)?
Agenda for meetings	• Who sets the agenda? • How far in advance is the agenda circulated or is it agreed at the meeting? • Does a meeting get cancelled if neither party has any agenda items?
Note-taking and reflections	• Will the meeting be recorded for the student? • Who will take notes? • Will the student be expected to write a summary of the meeting for the supervisors? • How will reflections on the meeting be captured and shared?
Working with the supervisory team	• How will the other supervisors on the team contribute to the process? • Who selects the other team members; will you all meet together or separately?
Establish the means by which you give feedback	• Do you mark the text electronically or by hand? • Do you podcast your comments?
Expectations around authorship on publications	• Clarify your position on the circumstances under which you wish to be given joint authorship on papers that are published by the student
Expectations about availability	• Clarify how the student should get hold of you in between meetings should they need to and how long you will normally take to respond.
Other issues	• Are there any other issues the student wishes to record as part of your working agreement?

B4.3 Probing and clarifying candidate-supervisor boundaries

At the beginning of their candidature, HDR candidates and their supervisory team must align their expectations, by discussing and reaching agreement on all key items. The particular circumstances of these candidates must be taken into account both when setting up the supervisory relationship and drawing up the supervisor-candidate agreement that becomes a very important document in terms of risk management.

Step 1: Customise and use the 8 sets of questions below to clarify expectations with the candidate and other members of the supervisory panel. Consider using this tool in combination with other B component tools.

Set	Questions
Meetings	• What will be the frequency, duration, and location of meetings? • How long before meetings should the Candidate's work be submitted for review? In what form? • What is the planned structure of meetings, including the agenda style, task recording, and which supervisors will be in attendance? Who will be responsible for this? • What are the responsibilities of the Candidate and Supervisors in the event that a meeting is postponed? • Are there any anticipated periods during which meeting frequency will be reduced due to limited availability of the Supervisors or Candidate? If so, what contingencies will be in place?
Feedback	• How long will Supervisors take to review work and give feedback after it has been submitted? • In what form will feedback be provided? Oral, written, electronic or other? • Has the Candidate and Supervisor agreed on the extent and scope of the feedback? • Has the Candidate and Supervisor agreed on a process of clearly communicating feedback so there is no ambiguity on how to proceed?
Supervisory team structure	• What is the composition of the Supervisory team • Allocate responsibilities of individual members of the supervisory panel (these may change during the course of candidature) • Are any of the Supervisors retiring, going on long service or study leave? Is so, when will this happen, and what processes will be put in place for extended absences?

Set	Questions
Publication plan	• How many publications, and what type of publications are planned for preparation during candidature? • What will be the publication type, target publisher or audience? • When and where will they be submitted? Give appropriate dates. • What will be the internal review and feedback processes? • How will conferences be funded? • Has authorship been discussed between the Candidate and their Supervisors and between supervisors? • The revised Publication Plan and Progress Statement will be signed off by the Associate Dean Research Higher Degrees at the same time as the nomination of examiners is signed off, and is a requirement for graduation. The minimum requirement should be that the student has made some progress towards publishing and disseminating their work.
Training, induction and skills development	• Has the Candidate attended a face-to-face induction for HDR students? If not, have they obtained relevant information? • Has the Candidate completed any required online Induction Program • Has the Candidate completed a skills gap analysis? • Is any coursework required for the degree? If so, when and which units?
Resources, support services and research centres	• Has the Candidate been advised of their access to equipment, study space, printing, computer, software, and funding available from School, Faculty and/or Research Centre? • What anticipated resource or funding issues could affect progress of the research? • Is the Candidate aware of the research centre most closely affiliated with their research and any services and seminars that are available and will be relevant? What opportunities for involvement/ integration might there be for the Candidate with the research centre? • Has the Candidate been advised of services/resources available from School & Faculty? • Has the Candidate been advised of services/resources available for HDR students at their institution? • Is the Candidate aware of other services available from the University, including Library, Counselling, Office of Research Innovation, Centre for Learning and Development etc.?

Set	Questions
Planning, tracking and assessment	• Has a timetable/plan for the complete thesis been created showing key milestones, especially the Research Proposal and submission of application to ethics to align with Confirmation of Candidature? • Have the Australian government guidelines and university rules which require completion by 4EFTSL (4 equivalent full-time student years) for Doctoral students and 2EFTSL (2 equivalent full-time student years) for Master by Research been discussed? • Is the Candidate aware of the Implications of Marginal Progress? • Is the Candidate aware of the importance of the university's student email? All official correspondence including access to progress reports each semester and ethics is via student email.
Rules and policies	• Is the Candidate familiar with the following rules and policies, and able to locate them? • University rules, policies and guidelines related to Higher Degree by Research Candidates • Australian Code for the Responsible Conduct of Research • Intellectual Property • Authorship and Plagiarism • Occupational Health and Safety and Ethics Policies (Human, Animal and Bio-Safety) and requirements • The university's online research repository and Digital Thesis publication • Professional editing and proof-reading of theses

Step 2: Consider whether further discussion using other tools is necessary or desirable.

B4.4 Documenting student/candidate-supervisor agreements

Effective and successful supervision requires students/candidates and their supervisory panels to:

- reach agreement on key issues,
- document that agreement, and
- renegotiate that agreement as appropriate.

This tool canvasses key issues which candidates and their supervisory panels should discuss, reach an agreement on and document their agreement. The list of issues can be extended or amended as appropriate and this tool can be used on its own or in combination with other B component tools as:

- the basis for discussion and negotiation at any time after or prior to a student's enrolment for a research degree, or
- part of the requirements for confirmation of candidature (the requirements for Confirmation of Candidature may include a requirement for a short (two or three-page) agreement to be developed and signed by the Principal Supervisor and the Candidate).

Once an agreement has been formalised, it can be revisited and renegotiated (e.g. perhaps as part of the progress reporting process at the end of each semester) to address changing needs, views and circumstances.

Step 1. Consider the expectations regarding supervision that need to be negotiated. Extend or amend the list of issues tabled below as appropriate and identify what you consider to be the available options, minimum acceptability and best practice.

Candidate/Supervisor Panel Agreement

Issues	Options available	Minimum acceptability	Best practice	Agreed practice
Candidature milestones				
Skill needs				
Project resources				
Timetable of action				
Availability (of both student and supervisors)				
Frequency of contact				
Response times				
Mode of contact (i.e. use of communications)				
Duration of contact				
Format for data interchange				
Feedback modes				
Visits				
Local or additional mentors				
Group support				
Working leave (for both student and supervisors)				
Direction statement				
Data storage				

Step 2. Document the negotiated agreement and have it signed by the student and each member of the supervisory panel.

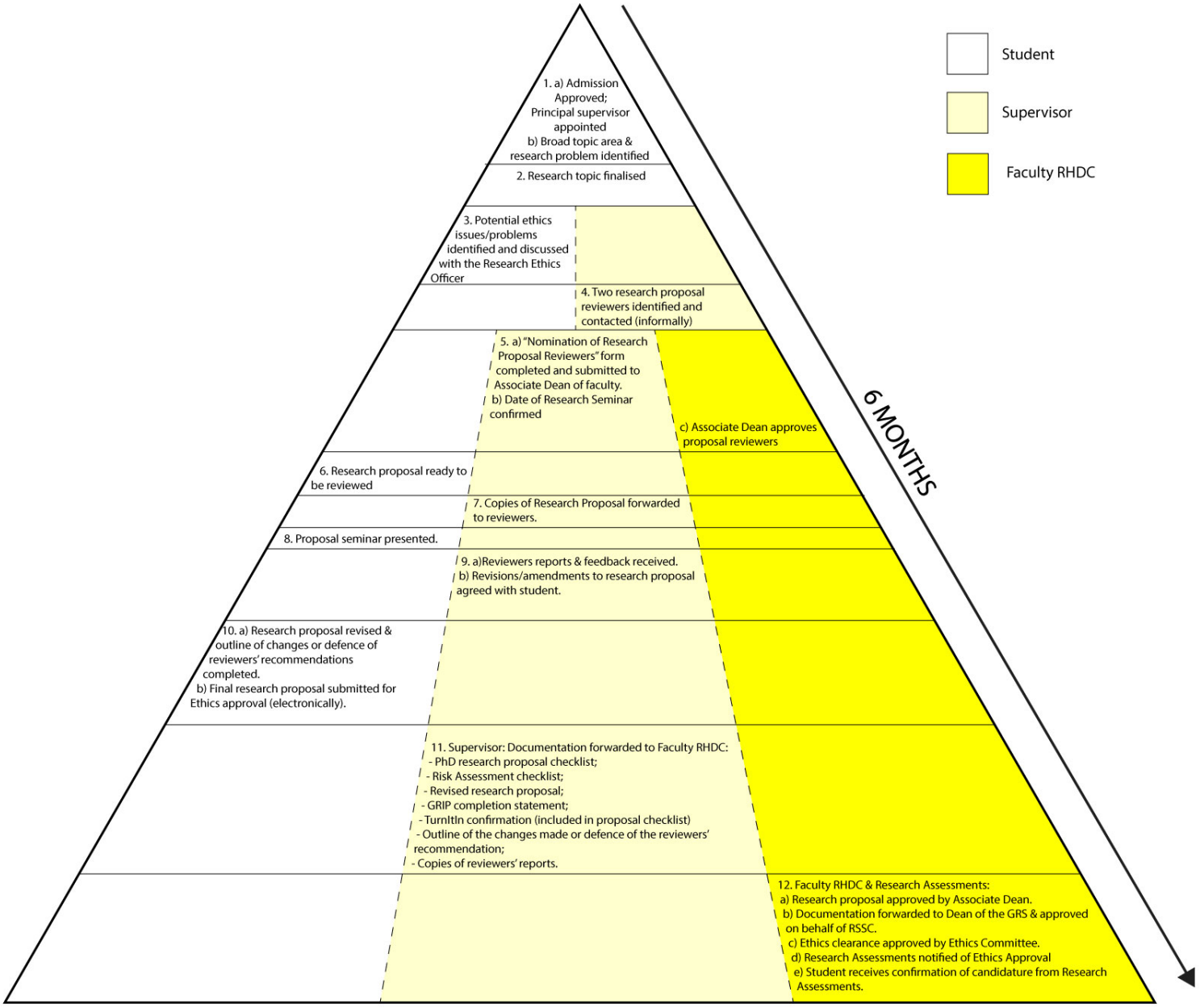
Step 3. Revisit and renegotiate the agreement as appropriate.

C. Achieving confirmation

Introduction

Having settled the HDR student into the candidature by clearly articulating the goals and gaining agreement about how the relationship will be conducted, the immediate milestone ahead is achieving confirmation of candidature. The Confirmation of Candidature is a critical phase within the HDR process as:

- this is when most of the major decisions regarding the research topic take place, and
- the project cannot proceed until candidature is confirmed.



HDR students need to be aware that:

- their candidature remains probationary until their research proposal is formally accepted, the research project has gained the required ethical clearances and their candidature has been confirmed, and
- until have they have gained full ethics approval for their project, no data associated with the project can be collected.

The months leading up to the confirmation of candidature are used to develop the student's research proposal. This design phase involves preparation, not just for the actual study, but also for the associated ethics issues associated with the project. The key questions are:

- Is the proposed research feasible & appropriate for the level of award?
- Does the candidate demonstrate appropriate written, analytic, and verbal skills?
- Is the continuation of candidature likely to lead to an examinable thesis within the time frame?
- Does the proposed study meet all the ethical standards of the institution?

Defining the research topic and question

Changing their broad idea into a defined research topic and question, which will be the focus of their study for several years ahead is a significant challenge for many HDR candidates. While candidates will often have a general idea of what they want to do and have homed in on a specific area of research, their knowledge of the chosen area and related areas may be limited. Where their ideas and areas relate to a research project too broad to be achievable by one researcher within the given time frame, the project will have to be further refined. In addition, the demands of a study at the HDR level means that past research in the area needs to be thoroughly understood, so that their study can build from a solid base.

As considerable resources are expended on HDR projects, the student has to generate a strong case for the rationale of the project and the feasibility of the research. These will be critical issues to be examined in the proposal presentation stage.

Developing the research proposal

Writing the research proposal can be difficult for a candidate, particularly if this is his or her first foray into research. The format for proposals varies widely between institutions and between research disciplines. The first stage is to be clear about the format and length of the proposal. In general, it is far easier to provide a lengthy summary of associated literature than to write a short and precise account of what the study is about and how it will be done. A clear title and abstract often signify clear student understanding and emerging mastery.

At this stage, supervisors should ensure that the student's project management skills include systems for systematically exploring literature, past and current studies, and recording references. Discussions about annotated bibliographies are often used at this stage. Developing annotated bibliographies helps students build and display their capability to gather and compare differing perspectives, concepts and theories of phenomena. Students whose writing and research skills need further development at this stage should be encouraged to seek the support of university writing and research consultants.

Supervisors can prepare their candidate for the proposal presentation by continually seeking:

- justification for the direction of the study,
- a clear and simple statement of purpose,
- clear and simple research questions,
- justification of the theoretical basis for the study,
- justification of the methods to be used, and
- clear statements of the study's potential outcomes and benefits.

Presentation and reviewers of the research proposal

Finally, in most universities, the HDR student's completed research proposal is reviewed by academics either within or outside the faculty and often presented orally in a symposium or presentation. The supervisor must ensure the candidate is aware of the current format for such an event, the timelines involved and the skills required. Students should:

- be encouraged to attend other proposal sessions to gain an understanding of the process,
- review their own proposal using the criteria that reviewers will use,
- be encouraged to participate actively in the process of selecting reviewers for their own research proposal, and
- become familiar with the process of responding to reviewers' critique.

Seeking an extension of time to submit the proposal

Candidates should formally request an extension, if there are extenuating circumstances affecting their ability to submit the research proposal for formal approval within the time period proposed by the institution. It is advisable to request any such extension before end of the research proposal time period, rather when time has run out.

Seeking ethics approval

Ethics is crucial for all research being carried out. Start thinking about the ethical issues associated with the study early on in the candidature, even though the application for ethical approval is often made simultaneously with the development of the proposal. Where draft consent form, interview protocols, and questionnaires have to be prepared, the ethics approval process may serve to focus the student on the practicalities of necessary preparation for fieldwork.

Tools

As shown below, this component has several subcomponents relating to specific tools. See also: GRIP Module 5- The confirmation process.

Subcomponent	Relevant tools
C1. Overview These are tools for reflecting on current supervisor practices and setting developmental targets	C1.1 The DOs and DON'Ts of pre-candidature supervision C1.2 Scaffolding, role models and model documents C1.3 Exploring approaches to research
C2. Envisioning/planning the research project	C2.1 Developing a self-managing researcher C2.2 Assisting students to select a research topic C2.3 Exploring possible and impossible study directions C2.4 Outlining a possible shape for the study C2.5 Assisting students to develop a Central Research Question
C3. Writing the proposal (The D2 tools and marterial on literature reviews and writing tips in Modules 4, 5 and 6 of GRIP may also be helpful)	C3.1 Searching the literature: How, why, what and when? C3.2 A recommended initial literature reviewing process C3.3 Template strategy for dealing with the literature C3.4 Yes AND ... Yes BUT ... strategy for avoiding plagiarism C3.5 Providing feedback on drafts C3.6 What will drafting and editing involve?
C4. Gaining ethics clearance	C4.1 Gaining ethics clearance C4.2 Case study on the need to declare risks in the ethics application

Subcomponent	Relevant tools
C5. Proposal presentation (see also: The material relating to the oral presentations in GRIP Module 5)	C5.1 Using the 3MT framework to assess and develop presentation skills C5.2 Top tips to make your research presentation come alive and impact on others
C6. Selecting reviewers	C6.1 Selecting proposal reviewers
C7. Responding to reviewers comments on the proposal	C7.1 Responding to feedback from proposal reviewers C7.2 Case of reviewers rejecting a proposal

Many of these tools can also be used productively at later stages of the research journey. These generic tools may, however, need modification to better address issues relating to practice-led research, performing arts or visual arts.

C1.1 The DOs and DON'Ts of pre-candidature supervision

Do you agree with these DOs and DON'Ts? Can you add to the list? How do the component B tools relate to these DOs and DON'Ts?

Issue	Do	Don't
Expectations re roles and contact	DO achieve maximum clarity between supervisor/s and supervisee on roles and expectations – many problems arise from a mismatch of expectations about who has responsibility for what and how the supervisor/ supervisee process is proposed to work. DO negotiate and develop a written supervision agreement that outlines the agreed way of working: preparation for meetings, meeting structure, record-keeping, pre-meeting tasks and deadlines, contact between meetings, re-negotiation of meetings etc. DO meet regularly for supervision (preferably weekly for a full-time candidate and bi-weekly for a part-time candidate). At this stage, regular input and guidance is particularly important.	DON'T treat the student as a research assistant you are employing - whilst there may be some similarities in tasks and approach to project management, the candidate is not an employee. It is important for supervisor-student relationship is from the outset a learning relationship, where it is all concerned understand that each task is evidence of learning and skills development. DON'T do the work for the student! – whether this is literature searching, conceptually and analysing, writing or organising. It can be very tempting to step in and sort things out, especially if it is taking longer than you had expected for the candidate to grasp something. You must nevertheless allow the candidate the space to develop, learn and, ultimately, prove him/herself.
Support networks and skills training	DO ensure that the candidate fully understands the University and Faculty/School/College policies in relation to facilities and infrastructure support and research integrity and ethics – the design of the project needs to take account of institutional policies and DO ensure that the candidate attends/completes all relevant Inductions – these could include University-level HDR induction program/s, library induction, health and safety induction/s, ethics induction DO ensure the candidate undertakes any required coursework/training – work with the candidate to identify other required or optional coursework or training that might be relevant to support development in the pre-candidature period and make sure that s/he attends and debriefs with you on what they have learnt. DO undertake an initial skills audit with input from the candidate – early on DO discuss skills development priorities in the pre-candidature period after the candidate has settled in and you have had a chance to review some of their early work Do discuss best options for accessing assistance and support (e.g. via university support services and training, through guided reading etc.)	If there are many aspects of the candidate's knowledge and skills that need improvement DON'T focus on all deficiencies at once – prioritise (while pointing out the other areas that you can work on together later)! Even if the candidate is a non-native speaker of English, DON'T tell her/him to have the draft edited before it is given to you! It is important to supporting the candidate's development by seeing what s/he can produce without the assistance of a third party. You need to be confident in your knowledge of the candidate's strengths and weaknesses, if you are to guide and support that candidate in addressing the areas where further skill development is required.

Issue	Do	Don't
Supervisory Pedagogy - general	DO make your expectations explicit - What work needs to be undertaken in the pre-candidature period? How long do you expect each part to take? What is the timeframe in which you would consider that a full first draft should be completed?	DON'T shy away from expressing concerns about the candidate's progress! You need to allow time for adjustment and development. If after several months, you are concerned that the candidate is not demonstrating the orientation to research studies or the capacity to produce work at the level required, it is important for the candidate that you: • are honest about your concerns, • continue to assist the candidate, and • try to ensure that as much support as possible is provided to the candidate
Scaffolding	DO employ instructional scaffolding to promote the learning process for the candidate DO provide models to assist the candidate to appreciate the nature of the work and the standard they should be aiming for	DON'T structure tasks too tightly! It is important to leave room for the candidate to learn and develop through having to make decisions, plan for themselves and make mistakes. DON'T provide only one model (unless there is only a single designated acceptable option). In many cases, there may be 2 or multiple acceptable approaches to accomplish a task well. In those cases, it is important to foster awareness of the range of acceptable and non-acceptable responses as part of a broader process of consciousness raising regarding the conventions of the given academic discourse or practice.
Meeting deadlines	DO set realistic deadlines taking account of the candidate's skills and circumstance and your own circumstances. DO make sure you have a means of maintaining contact and/or that another member of the supervisory team can help out, whenever you are going to be away Do monitor and develop the candidate's ability to set deadlines and meet agreed deadlines. You need to know on a regular basis, that the candidate is on task and on track. DO make sure you flag and discuss any indications that things have started to fall behind schedule or that contact is less than planned. If such issues continue, DO put your concerns in writing.	DON'T allow things to drift if meetings start getting cancelled and/or deadlines not met.

C1.2 Scaffolding, role models and model documents

Instructional scaffolding includes processes such as:

1. With the candidate's input, designing pre-candidature tasks into manageable chunks with key deliverables. Although development of a good quality candidature proposal is iterative in many cases, the literature review is normally the key to moving from the initial project concept to a comprehensive, well conceptualised proposal for the research. As even a literature review may be quite daunting for some, breaking it down to core areas of literature and working on each area for a defined period may help.

2. Providing models to assist the candidate in appreciating the nature of the work and the standard they should be aiming for. Exposing students to relevant role models and model documents is an important part of the scaffolding process and can include:
   - encouraging the candidate to regularly attend the Faculty/School/College's candidature confirmation presentations,
   - providing your supervisee early on with 2-3 exemplar candidature proposals in the format required for your Faculty/School/College. Use these to discuss both what makes for a good candidature proposal and what the official guidelines require,
   - providing models from your field for sub-components in the proposal. These models can include excellent literature reviews in your discipline or excellent descriptions and justifications for a methodology. Ask the candidate to identify what distinguishes a good piece from one that is less strong, and
   - encouraging the candidate to review completed theses in related areas to gain an appreciation of the nature and style of final product to be produced.
   - What other models could you provide? How can you best present those models to the student?

3. Use scaffolding techniques (questions, awareness raising and practice activities) to support learning and development for each component of the candidature proposal and presentation

4. Provide constructively critical and honest feedback on drafts. See the Component B and Component C tools on giving feedback.

5. Encourage the candidate's capacity for self-reflection about their work and progress, as this is vital to achieving excellence in research. Good researchers are always looking for ways to improve and are never fully satisfied with their work! Get into the habit of asking your supervisee to identify what s/he believes are strengths and weaknesses in their submitted work before you provide any feedback

C1.3 Exploring approaches to research

There are two productions from the candidature; the thesis, and the research-trained student. One of the ironies of formal PhD and Masters training programmes is that after several years, the successful student knows a great deal about the methods and issues they have encountered on their specific journey, but may know very little about alternative approach to research and research fields. Indeed, many novice supervisors may also have limited understanding of many approaches to research and unconsciously restrict the options available to their subsequent students. Under pressure to confirm candidature, often all available resources are poured into the development of the chosen method for the study and both stunt and supervisors ignore alternative approach to research and research fields.

HDR students arrive at the start of their candidature with very different levels of academic knowledge, methodological awareness and fieldwork networks. Each of these areas of knowledge will influence how they shape their study. Some students will have a passion for a specific area of theory, others for a method of data collection, and some come with practice based issues and dilemmas. The strength of their emerging proposal will be founded on their strongest sources of knowledge, but similarly the weakness will be based on their lack of understanding in specific areas. In the early stages of candidature, supervisors need to assess the level of research knowledge that students possess so that:

- students can be referred for additional support where necessary,
- a supervisor –student conversation about the spectrum of possibilities available for the exploration of the student's chosen area can begin, and
- the supervisor can encourage the student to understand and review the various approaches to research to see what options they have for their study.

Supervisors can guide students to appropriate knowledge sources to build up academic knowledge and encourage field investigation to acculturalise students in their chosen field, so that networks and understanding are developed. However, research methods are often the subject of targeted courses run in parallel with thesis development. Some students may have been involved previously in research experiences and research methodology courses, but require their knowledge base to be reactivated.

Developing the study requires developing a continued synergy between what the study hopes to achieve and the methods by which it might be operationalised. Without such discussions, the study method is likely to be impoverished, restricted, and may not grasp at new and unique methodological approaches that could be a salient feature of the final thesis.

Reviewing the options for approaching a research study also involves developing the understanding of the candidate about their own role and position in the study. This will be vital for their later method chapter write up. Many students arrive at such studies with stereotypical views of research gathered from a lifetime of viewing researcher roles in Hollywood movies, on the Discovery Channel, during Election psephology, and passing surveys in shopping arcades. These images appeal to the desire to control from within a white coat rather than to merge into the field of practice. Supervisors need to discuss what role the researcher will play in the study. The complexity of being a participant observer requires significant preparation, so that the researcher can combine the skills of data collection with social interaction. In many studies, the social interaction with gatekeepers will be a critical part of the determining access and perhaps the depth of the study.

Suggested base for student – supervisor discussions on research approaches

The following table can serve as a basis for student – supervisor discussions, that provide for the student with a basis for justifying why a particular approach has been taken and why other approaches have been rejected. Confronting this issue early on both opens opportunities of choice, and also beings the development of the student's research knowledge and ability to learn from understanding

surrounding student studies that are being presented, developed and completed in the University.

Note: Naturally, specific approaches are more aligned with specific disciplines, and there are issues to be considered when extending traditions. However, the increasing use of mixed modes studies and cross-disciplinary studies have enabled a greater freedom in method development.

Is the study attempting to explore (what/where /when), to understand (why), or to predict (how)? What method will achieve the goals of the study and make a contribution to knowledge?

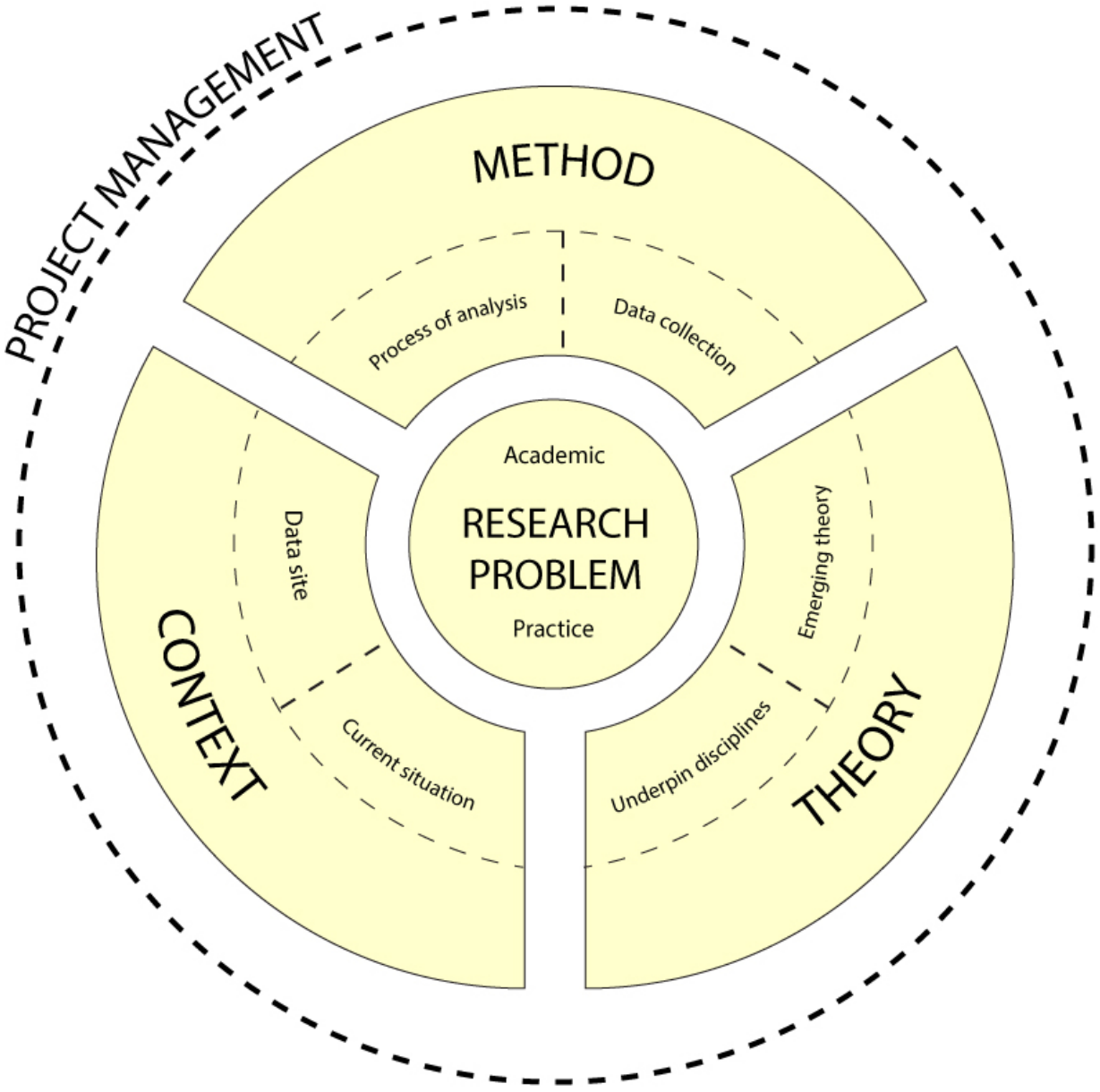
Continuum of research approaches (dependent on context, goals and resources)	
Knowledge as fact	Knowledge as perception
Researcher detached	Researcher immersed in practice
Researcher as controller	Researcher field interactive
Participant as object	Participant as co-researcher

Positivist	Post Positivist	Social Review	Constructivist	Critical	Participatory
Scientific hypotheses	Mixed method	Case studies	Constructivism	Autoethnography	Practice-led
Lab experiment	Post-positive field initiative	Histories	Phenomonology	Narrative enquiry	Practice-based
Field experiment	Critical realist	Ethnography	Interpretivism	Critical theory	Action-research
			Grounded theory		

C2.1 Developing a self managing researcher

Supervisors should ensure students are encouraged to take charge of the project and display the self-management skills necessary for future research responsibilities. Most students assume project responsibility before or during their proposal stage. If this is not occurring at that time, it is an indicator that the student may struggle with future progress, especially if the network skills or writing skills are limited.

Students should be encouraged to manage their own research study and plan how to build their research learning. They should get into the habit of creating an agenda for meetings with their supervisors – taking charge of the project and leading the exploration. The following diagram provides a map about how the various stages of the research study connect and how students should manage the whole process, developing awareness of which stages they are progressing through.
Students can use the framework below to develop the design of their study.



The framework provides a model of how a research study may be developed and managed. It can be adapted to suit the needs of different disciplines.

What	What has to happen
Research Problem at the heart of the study	Needs to be expressed both as a challenge that exists in the real world, as well as a gap in our theoretical or conceptual understanding
Project Management	Student must manage the progression of the study
past Academic Theory	Student needs to become knowledgeable about past Academic Theory linked to the area of study
Emerging Academic Theory	Student needs to be aware of what is Emerging as issues in current knowledge
Current situation	As the study progresses to examine a current issue, the student needs to accumulate knowledge about the Current situation and influences shaping the phenomena in question.
Data Site	Student needs to selecting the specific context or Data Site for the HDR study as a part of the wider field or population
Data collection	Student needs to clearly state what Data will be Collected
Data analysis	Student needs to clearly state how Data will be analysed. The analysis must produce data that informs the original research questions, both academic and in the field of practice.

Students can use this framework to:

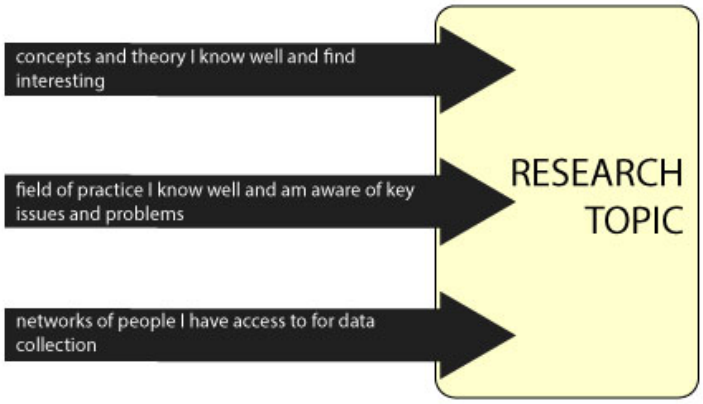
- determine where their study is at, and
- remind themselves of how each component of the project is inextricably linked to other components needed for the successful progress of the study.

C2.2 Assisting students to select a research topic

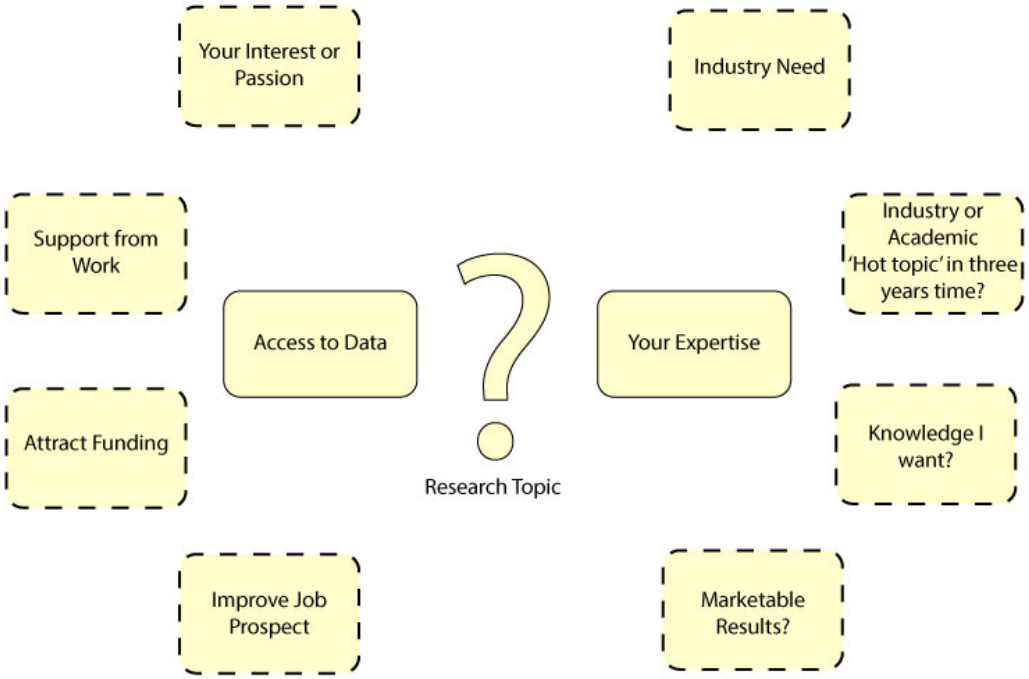
While some students have a clear idea of their direction, many students need to use the initial discussions with their supervisors to help them focus down to an achievable higher degree study. The aim is to agree on exploring an issue or question that will useful to society and add to existing knowledge. It is important that students build from their strengths in terms of existing knowledge bases and relational networks.

Most supervisors will encourage students to explore literature and especially theses in the chosen area, so that the students' increasing awareness of what has been produced can influence how their studies are shaped.

Where the student generates a range of possible options, it is necessary to identify, which options have the greatest chance of success and to be aware of the risks associated with each option. While effective project management may involve selecting the most logical direction, passion is often an important ingredient of commitment to a HDR project. Especially with part-time students, student motivation can be a key issue in achieving completion of candidature.



Students should be aware of a range of criteria that they can use to judge the value of each of the options that they have produced. The criteria that follow provide a basis for this discussion and can be extended and modified for specific disciplines. These criteria may be weighted for particular circumstances, where some of the issues appear to be more important than others. Although constructing a table and scoring the options may not produce a clear direction for the study, it will serve as a basis for discussion and negotiation.



C2.3 Exploring possible and impossible study directions

HDR students sometimes have a very clear idea of their study focus, but often produce a range of options, seeking guidance and confirmation on a direction. Experience provides supervisors with a range of red flags about what studies are not well founded, achievable, within resources or suited to the time available. Although the goal may not be choosing a safe topic, the supervisor has a central role in ensuring that the student does not pursue a direction that will be later radically criticised at proposal.

Generally the task is to focus the initial idea down, so it is focused on a specific area, industry, initiative or set of people. A very complex study may need to be reduced to one element. This ensures that a limited data collection can still provide an effective sample of the phenomena being investigated. Often studies are framed to provide outcomes that cannot be achieved by one researcher in a limited time.

Students without experience often choose an area that is topical, but has significant existing research centres, a topic that is just too vast, or one that while interesting is an area where they lack existing relations or knowledge. Access is often all for field data and supervisors need to know what connections students have to various phenomena.

Criteria for assessing practicality

Searching questions need to be asked about. Finally, is the study in dangerous ethical or political ground?

Issue	Points to consider
Use and benefits	• What will be produced and for whom – what is the use of the study apart from personal completion • Any likely outcome? • Any likely benefit? • What original contribution will it make to the field of knowledge? • Can the significance or importance of this project be explained? • Already well researched?
Theoretical base	• Some good practical issues and dilemmas often lack a theoretical base – how will they be tied to theory, the determinant of examination success. • Any theoretical base?
Difficulties with data	• Is data too obscured? • Is a data – outcome mismatch likely?
Resources	• Does the student have the time and money to make and keep contacts, especially if they are at a distance? • Is it too big? • Is it too complex? • Is it too distant? • Is it of appropriate scope for the degree being undertaken? • Can it be completed within the candidature period? • Does the researcher have (or can the researcher acquire) any relevant field connections? • Are there resource issues? • Are there location issue?
Danger	• Is it politically unacceptable?
Other?	

Assessing the practicality of potential study titles.
Using the criteria listed above to critique the following titles provides an opportunity to discuss with colleagues or students what might be an issue with these thesis directions and how they might be tailored to be acceptable.

1. Assessing Transformational Leadership Capabilities.
2. Determining an Appropriate Programme for Vocational Training in Malaysia.
3. European Perceptions of Australian Products.
4. Reviewing the Current Relevance of the Geneva Convention.
5. The impact of relations between Boards, stakeholders, management and unions.
6. The impact of customer service on brand perceptions.
7. The growth of convenience health foods outlets.
8. The decline of formal religious commitment and social ethics.
9. The motivation underpinning successful senior executives.
10. Comparative management styles across Australian industry sectors.
11. Export initiatives in the Queensland dairy industry.
12. Determining critical success factors for mature HED students.
13. The Impact of Climate Change on Same Sex Relationships

C2.4 Outlining a possible shape for the study

Once the student and supervisory team have agreed on a research option worth prusing, the next stage of the process is to draft out the possible shape of the study. This often occurs while the student is reviewing associated literature and reading about the avilable approaches and methods that may suit such a study. An over-emphasis on literature review at this stage can often, however, be to the detriment of:

- crafting the practical dimensions of the study,
- clarifying what it focuses on, and
- clarifying how it will be done.

The following format for a One-page Research Proposal Summary helps students to focus by gaining a clear idea of the proposed direction of the study on one side of A4. The aim is to capture the essence of the project, rather than produce many pages that often obscure the structure of the study. This format can be modified for diverse disciplines, so that students can:

- make a short statement to supervisors about their intended study or
- compare the options that are confronting them at that time.

One-page Research Proposal Summary	
Title An exploration of...	Focus, location, participants, processes, goals.
Purpose of Study This study will...do what and produce what	
Justification Why spend the time – what is the need and value? Why I can complete it – my knowledge and network.	
Academic Objective The study will contribute to what field of study? What are key theories and concepts in the field?	
Practical Objective This study will contribute to...What problem	
Research Questions/Hypotheses What is happening? What is the impact? What is working?	
Research Design What research approach - why? What sample? What is the unit of analysis?	
Research Method Collect what from who how when and where?	Case study – survey – record scan – observation – focus groups – interviews- secondary data

C2.5 Assist students to develop a central research question

Research projects become possible and more manageable once students gain a clear sense of a central research question to guide their reading, research and reflection. A clear research question:

- helps define the scope of the work to be done, and
- facilitates the kind of thinking, researching and writing that will result in the timely completion of a thesis making a significant and original contribution to knowledge.

Supervisors need to work with their students to ensure that they achieve the right balance between being too broad or too restricted, and operate with a central research question enabling them to:

- read with purpose,
- develop an appropriate methodology,
- achieve a substantial theoretical underpinning for their work, and
- undertake the necessary research.

Students need to be prepared for their central research question to evolve and change during the course of their projects. Although some students remain unclear about their central research question even in the final stages of completing their thesis, the move from a general topic to a specific question:

- typically occurs in the candidature phase, which usually involves intensive preliminary reading so students become familiar with knowledge of the area, and
- sometimes occurs during the collection of data or the testing of a pilot survey.

The two steps below can be used at any stage of a student's research journey.

Step 1:
Have the student review the three examples below and note how refining the research question typically entails reduction of scale and clarification of the issue. Remind the student that this refinement takes time and effort and that a supervisor would have probably have guided and worked with the student over weeks or months to assist the move from a general topic to a specific research question.

Example 1 (hypothetical)
Note how a structure is emerging

Initial topic	Women in Nepal	
Refinement 1	Educated women in Nepal	
Refinement 2	The role of educated women in Nepali politics	
Refinement 3	The role of educated women in Nepali politics 1990-99	
Refinement 4	The participation of Nepali women in Parliament in 1990-99	
RESEARCH QUESTION	To what extent and in what ways did female Nepali members of Parliament respond differently from male parliamentarians to issues of national development in the period 1990-99?	
Subquestions	How did the women and men respond? [Narrative/ Descriptive]	Why did they respond in this way? [Analysis/ Interpretation]

Example 2 (based on a PhD completed at Victoria University)
Note how a structure is emerging

Initial Topic	Chronic Illness: Psychosocial adjustment to chronic illness	
Refinement 1	Psychosocial adjustment to Huntington's disease	
Refinement 2	Psychosocial adjustment to Huntington's by: sufferers with early signs OR sufferers with developed illness OR carers/family	
Refinement 3	Psychosocial adjustment to Huntington's by sufferers with early signs of the disease	
RESEARCH QUESTION	What are the variables determining why some people adjust well and others do not adjust well to being diagnosed with Huntington's disease?	
Subquestions	How did they respond? [Description]	Why did they respond in this way? [Analysis/ Interpretation]

Example 3 (from the Graduate School of Management at La Trobe University)
Suggests an approach to answering the central research question

Initial Topic	Managing business growth		
Refinement 1	Managing business growth in Australia		
Refinement 2	Managing the growth of family firms in Australia		
Refinement 3	Managing the transition from SME to large firms in Australian family firms		
RESEARCH QUESTION	What business decisions are made within family firms that facilitate firm growth beyond the SME level?		
Subquestions	What common obstacles need to be overcome to facilitate growth in family firms?	How have these obstacles been overcome?	Is there a pattern in these growth-related decision processes, and if so can this pattern be articulated in a decision-making or information-processing framework?

Step 2:
Ask the students to keep a record of their own efforts to refine their topic into a well-focused viable research question.

C3.1 Searching the literature: How, why, what and when?

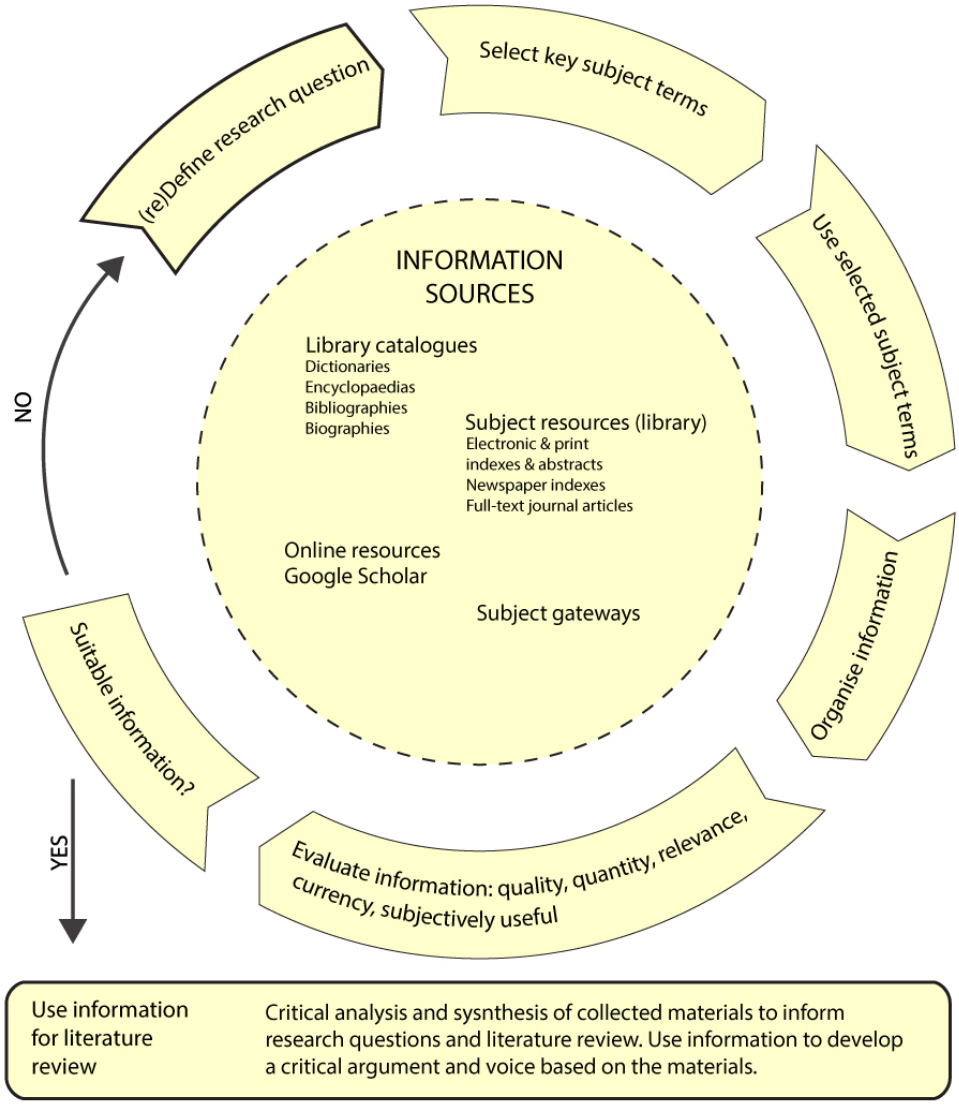
A literature review is a critical survey and assessment of the existing research on a particular topic. 'Research' on a topic will include data, theories and approaches.
'Literature' is used in this context to mean the body of published work related to the topic. It can include web-based and multimedia materials as well as books and journal articles.

Doing a 'literature review' involves 'reviewing' the relevant literature in two senses.

1. 'reviewing' or looking over relevant material, familiarising yourself with key concepts, debates and research findings. The catch here is that it's not always obvious initially what material is 'relevant'. Part of the task in reviewing the literature involves conceptually defining and outlining the body of literature to which your project relates.
2. preparing a 'review' or written report, much like a multi-facetted 'book review', informing your reader about the available literature, its insights and limitations, and how your own research project engages with it.

The literature-research cycle

As the diagram below shows, the two processes of reading the literature and writing a review are intertwined: starting to writing a literature review, highlights gaps or topics requiring further searches of the databases and reviews of additional literature. HDR students can expect to continue searching, reading and reviewing the literature related to their topics throughout their candidature.



C3.2 A recommended initial literature reviewing process

Do you agree with the 3-step process recommended below? What changes or refinement could you suggest? How will you deal with the issue of plagiarism? How will you provide feedback on the student's writing? Can any Component B tools or other Component C tools be used to assist the literature review process?

Step 1. Suggest important references for the candidate to read and review.

Step 2. Encourage the student to undertake her/his literature searching and bring outcomes of searches to supervision meetings for discussion.

Step 3. Test out your supervisee's critical literacy capacity, including their ability to read and distil key theoretical, methodological and/or empirical insights from their reading. Ways of doing this include:

- building a summary table to help support the candidate in developing an overview of recent relevant studies,
- insisting on the supervisee bringing some writing for each session, so that you can assess the candidate's writing and referencing strengths and weaknesses,
- asking any supervisee daunted by the task of writing the complete review to begin by writing smaller chunks, such as part of a section or a paragraph,
- asking the supervisee to write a short piece comparing and contrasting two articles or groups of articles or comparing perspectives on a particular debate (helps develop and document the candidate's critical capacities), and
- helping the student to use these shorter pieces to build a more comprehensive literature review.

C3.3 Template strategy for dealing with the literature

While it is particularly relevant to the pre-candidature stage, reviewing the literature is something that students should be doing virtually until they submit their thesis for examination.

Though not sufficient for development of the literature review in the proposal, this tool's 4-step literature review template process is very useful for students unfamiliar with literature review as a concept or practice. Students using this tool employ standard categories across the literature they review and so can more easily compare, contrast and note the shared or different approaches taken by authors to the kinds of issues they discuss, or to the methodologies and theories they use. In this way, students can group maybe 150 different articles into perhaps five or six main approaches or schools of thought, demonstrating how they are providing critical commentary on the literature they're reviewing, rather than simply reporting on what's been written.

Using this template approach enables supervisors to:

- gauge what sense their students are making of what it is they're reading, and
- engage in discussions focusing on the relationship of particular texts to students' own research area

Supervisors can implement this template approach by encouraging students to:

- begin using Step 1 in the early months of candidacy, as they attempt to become familiar with what constitutes the literature for their field,
- continue using Step 1 throughout their candidacy,
- begin making template entries according to Steps 2 and 3 as they become more familiar with the literature, and
- add information to the templates at any time.

Step 1: What's in the text?

For each text, fill in the following:

Title	Issue	Scope	Methodology	Theory	Findings	Gaps

Student summarises key points of the publication in terms of chosen categories, such as:

- research question/issue being investigated,
- scope of investigation/research (e.g. group(s) being investigated, size of sample, country or locality in which research was undertaken, etc.),
- methodology,
- theoretical framework, and
- major findings.

Students should not expect to fill all boxes on the template. They might, for example, only become aware of the theoretical framework many months after first reading the text, once they can reflect back in the light of additional reading and increasing knowledge. They can then simply go back and add the missing information to the template.

Step 2: How am I borrowing, building on them?

For each text, fill in the following:

Title	Issue	Scope	Methodology	Theory	Findings

The summary from Step 1 provides the beginning point for students' own critical reflection on the

relationship of their own project to the texts they are reviewing. In this step, they should indicate the ways in which their study is borrowing from/building on each reviewed text as specifically as they can. By acknowledging the work of others in this way, they will be positioning their own work in relation to the literature (existing knowledge). This provides an opportunity for supervisors to have focused discussions with students on the relationship of their own research areas with what's in the literature.

Step 3: How am I going beyond text?
For eact text, fill in the following:

Title	Issue	Scope	Methodology	Theory	Findings

As they become more familiar with the literature and begin to refine their own particular research question, students and supervisors can start specifying how the student's study goes beyond or differs from what's in each reviewed text. In doing this, students will again be positioning their own work in relation to the literature, but now also pointing to what is new and original about their work vis-à-vis the literature (existing knowledge).

Step 4: What is the signifcance of my new knowledge, in terms of issue, scope, methodology, theory or findings?
As simply saying something is different from what's already in the literature is not sufficient, students and supervisors can together explore further questions, such as:

- Why do we need this new information?
- How will it be significant? ,
- How might this new knowledge change the way we think about what we can read in the existing literature?
- Will the project provide new theoretical or methodological insights?
- Will it have practical as well as intellectual outcomes?
- Will it cause people to think about the issue in a new way?

C3.4 Yes AND..., Yes BUT... strategy for avoiding plagiarism

The supervisor's role, especially in the early stages of candidacy, includes:

- directing students to sources that are more important than others, and
- working with them to position their own research in relation to existing knowledge (i.e. what we already know about the field and the topic through the literature).

As students read a text that contain key ideas, concepts or content relevant to their research project, they can ask:

- 'How does my particular research confirm, or add to, what the author says?', and
- 'How does my particular research contradict or throw doubt on what the author says?'

They work with two columns: a Yes AND column and a Yes BUT column.

- 'Yes, I'm using the other person's ideas or findings, and my research confirms or contributes to and extends those ideas and findings by ...'
- 'Yes, I'm using the other person's ideas or findings, but my research questions or contradicts those ideas or findings by ...'

They are now no longer simply repeating what someone else has written. They're establishing a relationship between their own research and somebody else's ideas. They are positioning their thesis in relation to other works.

Example: Applying Foucault's discursive theory of knowledge and power to their own project.

Yes AND ...	Yes BUT...
'Yes, I am using Foucault's model, and my research confirms the applicability of the model in terms of: (a) (b) (c) etc. and extends the applicability of the model in terms of: (a) (b) (c) etc,	'Yes, I am using Foucault's model, but my research questions the applicability of the model in terms of: (a) (b) (c) etc. and contradicts the model in terms of: (a) (b) (c) etc.

It's likely that students will have comments to include in both columns—that is, that Foucault's framework illuminates some aspects of what they are researching, but not all. They're now in a position to consider how they might adopt Foucault, and/or what other theories might help explain those aspects that Foucault doesn't seem to explain.

Adopting this strategy, they are establishing a relationship between Foucault's model and their own research—they are positioning their work in relation to Foucault. In this way they are saying something new about Foucault, by showing the applicability or the limitations of his model to their research area, as well as saying something new (and original) about what it is they are researching. They are joining a conversation—actively engaging with existing knowledge, not passively reporting it.

Supervisors will need to establish that students understand how to apply the strategy, but the emphasis should be on encouraging students to take responsibility for deciding what to include in the Yes AND and Yes BUT columns, which requires reflection and imagination on their part. Supervisors might point out that the work involved is part of what it is to become an independent researcher.

C3.5 Providing feedback on drafts

Consider the guidelines below. Do you agree or disagree with them? Are there other guidelines you could add?

When	Action to Take
Always	• Provide key points of feedback in writing, so the candidate can reflect on it further over time • Always give positive feedback as well as criticisms • Keep a record of your feedback (in case there is a dispute down the track). • Ask the candidate to give you back key feedback on what they need to improve – this tests comprehension of your feedback
If a lot of material needs work	• Don't overdo the detail • Plan for what it is best to work on first
If there are errors in expression	• Identify the problems through detailed annotation of a small section, but expect that the candidate will take on the responsibility for reviewing and revising the whole draft
At the following session	• Review the revised draft with the original (containing your feedback) to gauge how well and how the candidate has engaged with and developed from your feedback
If the improvement is superficial or limited after several sessions	• Consider whether there are underlying factors impeding the candidate's capacity to improve (e.g. gaps in conceptual understanding, lack of academic discourse knowledge, English comprehension) • Suggest the student consider adopting a more strategic approach making good use of any support available to assist the student to better address these factors

C3.6 What will drafting and editing involve?

The movement of draft texts backwards and forwards between the supervisor and the candidate is at the core of supervision work. Student drafts are progressively developed through feedback from the supervisor from development of the proposal through to the completion of the thesis text.
An early discussion between candidate and supervisor about the process, conventions and goals can be a valuable part of the early candidature.

Editing issue	Considerations for discussion	Agreements and decisions
Candidate capability	• Has the candidate written papers, theses or dissertation before? • Has a piece of current written work been set and provided? • Is the candidate a confident writer at HDR level? • Is this an area for early skill development? • Does the candidate recognise their ability level? • Is the help of the writing consultant needed? • Is progress to the standard being maintained?	
Text security	• What will the system be of text exchange to ensure that text generations and authorship are clearly identifiable? • What will the system be to ensure that text can never be lost during the candidature?	
Levels of editing	• Substantive editing - aims to ensure that the structure, content, language, style and presentation of the thesis are suitable for its intended purpose and readership and this is a development process carried out by supervisors and writing consultants within the Faculty. • Copyediting - aims to achieve accuracy, clarity and consistency in a thesis. It does not involve significant rewriting, but simply provides guidance to ensure that a single voice or argument is produced for the reader. This is often used when the chapters have been drafted and the final text is being aligned to produce a cohesive and consistent argument. • Proofreading – or verification editing is about a final polish for the text to ensure imperfections are eradicated, with spaces, spellings and punctuation corrected. There may be suggestions to improve some readability but there are no conceptual issues raised. Editing above the level of proofreading that is purchased by a candidate is usually considered ethically inappropriate HDR candidatures and commensurate with employing 3rd parties to undertake parts of the research study. It has implications for signing off on the final thesis being the sole work of the candidate.	

Editing issue	Considerations for discussion	Agreements and decisions
Editing depth	Editing what and how? Is the editing about: • Document structure • Text structure • Text conventions • Readability • Argument structure • Concept clarity • Graphic display – consistency • Body/Appendix decisions • Comprehensive in terms of theories • Demonstrating mastery – summaries • Demonstrating knowledge contribution • Uniformity of voice • Appropriate genre • Appropriate for audience.	
Quantity and turn-round	• How much text does the supervisor want at one time? • Will text will explanations and missing components be accepted? • Will the exchange be digital? • How quick will the turn around be? • How will the candidate indicate they have taken the advice and made the adjustment? • What alternative or additional editing checks can the candidate access?	
Feedback	• How will the feedback be given? • What will the limit be on correcting text? • What will be the convention of providing advice for corrections? • What will the convention be for providing additional sources? • Will the candidate be advised if remedial work is necessary	
Final proofing	• A proliferation of typos can be the difference between a pass and a resubmission. The best source of editing resources is usually students who have had work done effectively recently. The Council of Australian Societies of Editors (CASE) will provide a listing of reliable editors. • It is necessary following discussion to provide a clear brief of what is required and to gain an estimate of time and cost. Pre-planning can avoid this stage of the candidate being a last rush to complete. • How much of the candidates stipend should be reserved for this act? • The thesis should contain a description and reference to the editing service provided.	

C4.1 Gaining ethical candidature

Producing the proposal and gaining ethics clearance are simultaneous productions that both support each other. The demands of the ethics submission will produce greater clarity about what the researcher intends to do with whom and where. Proposals are often finely detailed in terms of academic arguments and justifications but light on what will be collected and how. Tackling the ethics application makes the candidate aware that detailed protocols will need to be submitted for filed procedures. These will need to be well aligned with research goals and outcomes and ensure the study can do what it is setting out to do.

While ethics discussions will help operationalise the study, they also will prepare the candidate for external interactions, where they carry the University name and extend the profession of researching into the public domain. Those involved in research with higher risk environments and subjects such as animal, children and medical procedures or chemicals will be well aware of the issues involved and develop such understanding with their students.

However, for most candidates in low risk environments what is required is a simple knowledge of their responsibilities to the public at large and specifically their research participants. The following four issues are those most relevant to all research students and form the basis of most ethics applications.

Issues for Ethical Consideration

The purpose of ethical clearance should be discussed with the researcher by the supervisor. The Supervisor should ensure the researcher has read the University Ethics policy and then examine the following issues with the researcher, in the context of the research study that is proposed, focusing especially on the four issues below.

1. The rights of the individual in research participation.
2. Confidentiality of the research data collected.
3. The primacy of the health of the participants
4. Storage and disposal of data.

1. The rights of the individual in participation.

The Supervisor should ensure that the researcher has considered the implications and consequences for participants who may be involved in the research. The following questions should be used as a platform for discussion.

- Does the research involve minors, mentally ill individuals, persons in dependent relationships, or from different cultural groups?
- What protocol will be given to each participant to disclose information about the study and ensure the participants can make an informed decision to be involved with the study?
- Will any participants not receive this data? Draft protocols should be shared with the student as a basis for the document that each participant should sign.
- Is any financial remuneration or other reward being offered to subjects for participation in the study that might act as an unfair inducement to be involved?
- Is any information about the study to be withheld from the participants?
- Will material that identifies subjects be recorded e.g. photographs, video recordings or any interview sound recordings?
- Will participants be asked to commit any acts that might diminish self-respect or cause them to experience shame, embarrassment or regret?
- Does the research involve any stimuli, tasks, investigation or procedures that may be experienced by subjects as stressful or unpleasant?
- Will the conduct of the research disturb or influence in a negative way the working relationship of the subjects and other groups of participants in their settings?

- What will happen when a participant in a dependent relationship refuses to participate?
- Are there any other ethical issues involved in the research?

2. Confidentiality of data collected.
- What actions will you take to ensure the privacy of individuals and organisations in writing up the study?
- Who else will have access to confidential materials (e.g. transcribers)? How will these people be included in the assurance of confidentiality?
- How will the confidentiality of records be maintained during the study?
- What form of pseudonyms will be used for organisations and individuals and how will they be agreed with those participants.

3. The primacy of the health of the participants.
If at any time participants are distressed by their involvement, will
- their participation will be terminated at once?
- the researcher will give immediate emotional support or withdraw if that is appropriate?
- the researcher will contact the supervisor and appropriate University services to offer appropriate counseling services?

4. Storage and disposal of data.
Records are required to be preserved for a minimum of five years. How will:
- the confidentiality of the primary data be protected during the period of their preservation?
- these original materials be destroyed after the study is completed?

Summarising ethical considerations
Following this discussion, the researcher should draft a response to the following questions:
- What are the possible benefits of this research to the subjects involved and to wider society?
- What are the possible risks of this research to the participants and their organisations?
- How will these risks be managed to ensure informed consent, the rights of individuals, confidentiality and security of data?

C4.2 Case study on the need to declare risks in the ethics application

Consider the case below and whether it could have been handled differently or handled better by the supervisors.

Amanda was carrying out a single case study in clinical psychology for her thesis. It was a longitudinal study focusing on one individual coming to terms with familial relationships. The ethics submission focused on the risk around this individual and the trauma associated with examining these relationships. As this examination of familial relationships was part of a process of therapy that individual was voluntarily undertaking, this risk was felt to be mitigated sufficiently to allow ethics approval. At any time, the participant could, if unhappy with the study, withdraw consent for use of material in Amanda's thesis

After Amanda's thesis was completed, it was discovered that the individual undertaking the therapy had suffered terrible abuse and trauma as a child at the hands of their family. Further questioning revealed that Amanda was aware of this and that this was why Amanda had chosen this particular individual for her thesis research. However, both Amanda and the individual in therapy became concerned for their personal safety should Amanda's thesis ever reach the public domain. This resulted in a huge dilemma for the university in whether or not to accept the submission of the thesis.

On the one hand, Amanda had undertaken the research with the individual's consent, and the results of the research were such that they were so personally sensitive they might incriminate and or result in threatening behaviour to both Amanda and the researched person. On the other hand, no indication of the need for an embargo had been noted at the time ethics was applied for, nor was it raised with the supervisory team at any point prior to submission so they could ascertain the possible acceptability of a complete embargo on a submitted thesis.

The university research degrees committee discussed the matter at length considering the following points:

1. A thesis is supposed to contribute to new public knowledge, but this research would not contribute to new public knowledge.
2. No indication had been given throughout the period of study that this problem may arise at the end.
3. It was arguably reasonably foreseeable that this problem might have occurred given the sensitive nature of the study and had it been highlighted on the ethics application originally, ethics approval may not have been granted.
4. Approving an embargo at the point of submission was beyond the remit of the Research Degrees Committee, as only the Ethics Committee could approve embargos at that university, and hence the decision should be deferred back to them.
5. If the embargo was not granted what would happen?
   Either the individual would withdraw their consent and the thesis would not be submitted;
   or the student decides not to submit the thesis;
   or the thesis is submitted and the parties concerned take their chances.
   (Should this happen, the legal responsibility of the University would need to be explored further.)
6. At no time during the progression of the thesis had the supervisors raised Amanda's aware of the possible risks involved in continuing with the study given the sensitive nature of the findings.
7. It seemed very harsh to ask Amanda to go away and complete another thesis and the university might even be liable to compensate Amanda if this was indeed the outcome decided.

The research degrees committee referred the decision back to both the Ethics Committee for comment and the University's legal department. On their advice, Amanda was allowed to submit on this occasion with a full embargo on publication. However stronger advice was drawn up for supervisors and students as a result of this and so that this example was not regarded as setting a precedent. It was felt that this situation could have been foreseen and avoided with closer care and attention being paid to the ethics process.

C5.1 Using the 3MT framework to assess and develop presentation skills

All research is presented at some point, so developing skills in the marketing of research studies is essential to all HDR students. Some mature students may already have developed their presentational skills to a high level in business situations. For others, making a presentation to Faculty staff over an extended period of time will require a significant upgrade in their current skill levels. Those who need development can gain valuable guidance by attending other research proposal seminars and research presentations.

Starting small and then expanding is a good way to develop a presentation. There is significant advantage in focusing on the key issues of the study, rather than trying to overload the audience with obscure literature. Most people want to know what the study is about and how it will be done.

The rules and judging criteria used in the intervarsity three-minute thesis (3MT) competition can be used to assess and develop presentation skills at any stage of the research journey.

The 3MT rules currently stipulate:

- A single static PowerPoint slide is permitted (no slide transitions, animations or 'movement' of any description, the slide is to be presented from the beginning of the oration).
- No additional electronic media (e.g. sound and video files) are permitted.
- No additional props (e.g. costumes, musical instruments, laboratory equipment) are permitted.
- Presentations are limited to 3 minutes maximum.
- Presentations are to be spoken word (e.g. no poems, raps or songs).
- Presentations are considered to have commenced when a presenter starts their presentation through movement or speech.

3MT Judging Criteria

Using the reviewer's criteria for assessment of the presentation is a good way to determine if the content is ticking all the right boxes.

Communication style	Was the thesis topic and its significance communicated in language appropriate to an intelligent but non-specialist audience?
Comprehension	Did the presentation help the audience understand the research?
Engagement	Did the presentation make the audience want to know more?

C5.2 Top tips to make your research presentation come alive and impact on others

The following Top tips to make your research presentation come alive and impact on others can be used to guide novice presenters presenting research proposals or conference papers.

Tip	Explanation
1. Start with a bang	• Tell them what this is about in simple terms • Give them the heart of the issue – hook them • With a picture, graphic and a story • Connect your subject to their reality
2. Key Data	• What is the purpose of the study? • What key research questions • What outcomes • What general method will be used
3. Rationale	• Why spend time doing this • The real issue to be solved? • The benefits that will be gained? • Background or location …. • Brief issues • Keep it tight • Use graphics and pictures • Limit detail
4. Existing knowledge	• Graphic of the related areas…. • Focus on key sources • Say how they shape your study • Confirm were the 'gap' is……
5. Con/Th/R framework	• Diagram with the key relations of the study • Show what you are measuring and how you will do it….
6. Operations	• Sample questions or formulae • Brief stages of analysis • Ethics/ Limitations • Time line for the study • Budget for the study
7. Method	• What approach and why? • What phases…. • What samples and why…. • What instruments? • What data from whom where and when
8. Show the study phases	• Use visuals …. • Use words graphically….
9. Then ….	• Practice….practice….practice • Rehearse in similar rooms • Time yourself • Get feedback
10. Remember to ….	• Take handouts – with your email & picture • Copies of the paper • Copies of your slides • Have a backup USB
11. Finally ….	• Prepare for questions! • Defensive points for weaknesses • Possible answers – extra data • Admit you don't / can't comment • End with clear contact details

C6.1 Selecting proposal reviewers

Institutional policies differ on the number, location, employment and selection of proposal reviewers. Reviewers need to be selected carefully as they can provide valuable input to improve the research proposal, and may become valued critical friends during the research project. While the nomination of reviewers will often be the initial responsibility of the supervisor, the student (especially, any student who has previously taken courses at the institution) can be an active participant in this process.

Once the proposal has begun to take structural shape, supervisors may find the following selection criteria helpful when drawing up a short list for potential reviewers.

Criteria	Comment
Equivalent Qualifications	Essential
Expertise	Essential for at least one member of the review panel: • discipline knowledge • research methodology • scope and timeframe • ethical and risk considerations
Experience	Desirable: • publication record, and/or • significant industry experience judged to be equivalent, and/or • specific knowledge relevant to the thesis • supervisory experience

C7.1 Responding to feedback from proposal reviewers

Following the proposal presentation, HDR candidates are required to formally respond to their reviewers' critique. This process is requirement for Confirmation of Candidature and serves to develop the candidate's capabilities to respond to future reviews of their conference and journal articles.

The issues raised by the reviewers may:

- be simple text changes and additions,
- require further thought and searching, or
- require detailed discussion to gain new understanding with which to engage with structural issues and adapt your proposal.

Supervisors should advise candidates to prepare their response to their proposal review by:

- consolidating the notes taken at their presentation, the reviewers' oral and written critique, and responses made to questions to gain clarification,
- separating the issues raised,
- responding to each issue individually,
- ensuring that the rationale for the response is clear, and
- ensuring that the detail of any additions, substitutions and deletions made to the text is clear and easy to trace in the new text.

The responses can be made using a template that produces a clear audit trail from the critique to the response and on to the actual changes made in the text. Most students will complete a Table of Amendments, attaching it to the reviewers' or examiners' reports together with a clearly marked copy of the proposal or final thesis indicating changes with track changes, highlighting or shaded text.

Steps for candidate's preparation of a response to reviewers:

1. Insert all of the reviewers/examiners comments in a Table of Amendments including the positive ones.
2. If there are notes on the hard copy of the text or verbal comments from a proposal presentation, include these in the Table of Amendments as well.
3. Address each of the reviewers/examiners comments separately and indicate either the changes made to the proposal/thesis in response, or why the candidate chose not to alter the text.
4. Choose the form of words wisely.
5. Wherever there is an insertion or change in the text indicate exactly "what has been inserted" – Page/Para number.
6. Mark any changed text to clearly show the amendments using tracked changes, coloured text or coloured/shaded background.
7. Clearly indicate that all of the reviewers/examiners comments have addressed.
8. Discuss all the proposed responses with the relevant supervisors

C7.2 Case of reviewers rejecting a proposal

Consider the case below and whether it could have been handled differently or handled better by the supervisors.

Alison came to her PhD later in life than many, having already been working in the university sector as a lecturer in ICT. Her career was being limited by not having a PhD, although she was well published and known within the e-learning field, and had won a number of prestigious research grants. As she was an experienced researcher, who could write well when she started, her supervisory team anticipated that supervising her would be quite an easy task. They were wrong. The fact that she could write for publication was actually the biggest hindrance to Alison's being able to write a thesis.

Alison struggled with the absolute discipline and rigour required for a thesis. When her supervisors questioned every word to remove any nuances or room for interpretation, she pushed back arguing this was her style. She was resistant to feedback on the scope of the study and refused to narrow down the question to something her supervisory team felt was answerable.

The crunch came at the candidature confirmation stage where she submitted her research plan, initial literature review and proposed methodology to a panel for review. The panel questioned exactly the points the supervisors had raised and Alison was not able to answer the questions with the depth required to pass. She failed and had 6 weeks to resubmit and be re-examined.

This was, of course, a complete crisis for Alison. She had never failed anything before; she was a well published, well respected researcher in her field; and she felt her supervisors had let her down. Clearly she hadn't been receiving the communications the supervisors felt they had been signalling. Now she had six weeks to make things right and no faith in her supervisors' ability to get her there.

As an immediate quick fix, another supervisor was added to the team to guide Alison through the six weeks of rewriting and preparation for resubmission. This then proved successful and Alison was allowed to progress. This did not, however, resolve the problem of the whole team working with Alison to complete her thesis. The original supervisors were the ones with the subject expertise and the new supervisor was literally there only for the process.

None of the parties particularly wanted to address the issue, as it was going to be an awkward and difficult meeting. Neither party trusted each other. Alison had lost faith in the supervisors. The supervisors felt a combination of guilt that they hadn't managed to get Alison through first time, frustration at being 'blamed', and demotivated at the prospect of continuing.

The difficult meeting was called and moderated by the new supervisor to the team. Everyone reviewed what they felt had occurred and got to grips with how the difficulties had arisen between them. The meeting was not particularly warm, but it wasn't aggressive. Once all grievances were aired, a way forward was agreed:

- the original supervisors would remain on the team as they did have the subject expertise and Alison did appreciate this,
- the new supervisor would also remain on the team to help manage the process and act as a point of mediation/moderation, if there was felt to be misunderstanding between Alison and the original supervisors, and
- Alison agreed to send a written note of reflection on each supervision meeting. This ensured that everyone understood where Alison was at, so if the reflection did not reflect what had been intended, another meeting could be called.

Although the experience upset Alison considerably, it also benefitted her in the longer term. She is

now a highly competent researcher and much more disciplined, rigorous and better at constructing arguments than she would have done had this not occurred. As the experience of initial failure also gave her some useful insights into a side of studying she had not previously encountered, she is now both a better teacher and a better researcher.

Alison completed her PhD part-time in 5 years, got her promotion and is now supervising PhD students, as well as continuing her successful career in her University. Her supervisors cite her final thesis as one of the best they supervised.

D. Doing the research

Introduction

When the provisional candidature has been confirmed, the student is cleared to begin their study. This is the phase of the research process, where the actual project is being undertaken. Pilot activity often prepares the students for critical interaction as the realities of the study meet the concepts in the proposal.

For supervisors, this is the stage where candidates often need close interaction with their supervisory teams to ensure that there is strong structural approach in place for conducting the study. Supervisors have the responsibility to:

- ensure that their candidates work on their projects,
- track the candidates' progress through the use of frequent reports to ensure that candidates make satisfactory progress,
- encourage their candidates to start writing about their research process and findings.
- Writing should not be left to the end of the process, rather, candidates should be encouraged to write often and early,
- encourage their candidates to start publishing where they show the capability, and
- encourage their stronger candidates to broaden their academic network through conferences and HDR workshops that bridge institutions and states.

Collect and analyse data

During this period, effort to collect data and analyse the data collected may indicate the need for changed strategies for the development of the study or the analysis of the data. Supervisors should refer students to the appropriate resource workshops to develop the necessary capabilities to operationalise their changed approach.

Writing during the candidature

As writing is one of the key elements of the research process, it is important to emphasise that writing needs to be done often and early. It is all too easy for the candidate to put off writing until the end of the research project, and then face with what seems like an insurmountable hurdle at the end of the project. If despite having working through the rest of the project, the candidate does not feel confident enough to complete the thesis, this can lead to attrition. Ensuring that the candidate starts writing early will avoid this problem.

The first step is to simply get ideas down. From these ideas, the candidate may be able to find new avenues for exploration, point to patterns in the data, and start analysing any collected material. The supervisor should try and establish a pattern of the student presenting material for discussion prior to meetings.

Publishing during the candidature

Candidates should be encouraged to publish their research during the HDR process, rather than wait until the end. Authorship is one of the main currencies for measuring the contribution and importance of researchers. Publishing by writing journal articles or conference papers:

- supports writing and validating the thesis (the thesis is less likely to be challenged if much of it has already been tested in the international literature),
- shares knowledge faster (candidates are able to put their research out in the public domain before it becomes dated),
- improves employability,
- builds writing skills,

- offers the benefit of additional critique and input from journal/book referees,
- engages supervisors in the project, and
- giving conference papers helps break down the isolation that many research students feel and extends their networks.

Supervisors should discuss joint authorship with students as a prerequisite to developing papers. Supervisors should review the institutional guidelines on this subject and ensure they make a significant and active contribution to the development and writing of the paper.

Tools

As shown below, this component has two subcomponents, which relate to specific tools. These tools can also be used with other components of the framework.

Subcomponent	Relevant Tools
D1. Project plans, contingencies and changes	D1.1Applying project logic to project planning D1.2 Identifying likely roadblocks D1.3 Assessing options to address identified roadblocks D1.4 Developing contingency plans D1.5 Addressing student-suggested changes to data and approaches
D2. Data collection, storage and analysis (See also GRIP Module 7)	D2.1Issues in data collection D2.2 Gaining and securing research partners D2.3 Systems for managing research information D2.4 Securing valuable data D2.5 Exploring options for analysis D2.6 Developing evaluation capability
D3. Writing (Some of the Component C tools may also be useful)	D3.1 A 3-step strategy for brainstorming chapters D3.2 Writing effective introductory and concluding paragraphs for thesis chapters D3.3 Exploring options for constructing the findings chapter D3.4 Exploring options for constructing the analysis, interpretation, discussion chapter
D4. Networking and disseminating research	D4.1 Building academic and professional networks D4.2 Systematically developing a researcher's academic network

The main motivation for starting postgraduate research is rarely the desire to write a large thesis. Yet this is what it will take to finish most HDR degrees.

D1.1 Applying program logic to project planning

Program logic is a method of constructing an evaluation framework that can guide the construction of such a study. Program logic (Funnell) focuses on providing a structure at the start for subsequent evaluation by looking at:

- who the program will impact on, and
- what the results could be.

Program logic also attempts to forecast what can be controlled and what may impact externally on the program. As such, it offers a risk management approach for a project and could be used both to map the direction of the study and also to review the study on conclusion.

Hierarchy of outcomes **For participants and stakeholders**	**Success criteria** **What will it look like? (Potential questions to stakeholders}**	**Resources and support action required within control** **What needs facilitating?**	**Resources and support outside control** **What are potential barriers and conflicts?**	**Performance data for comparisons** **What's the evidence?**
Participants				
Managers				
Organisation				
Business				
Profession				
Society				

D1.2 identifying likely roadblocks

Post proposal, the research student takes charge of the study and assumes a managing role. The supervisors' roles change from shaping study direction to monitoring study progress. While all proposals are mediated by the realities of carrying out the study and interfacing with people, organisations and artifacts who impact on the desired course of the study, the role of the supervisor is to ensure that changes are measured, assessed and accord with the basic alignment and intention of the project.

Supervisors take on a risk management role at this stage of the project and can develop a discussion with the student about the development of the study in this critical stage. Perhaps as importantly, the supervisor also needs to provide timely support, when such issues impact on the proposed study and shake the students confidence. Emotional support is critical. Ironically the fear of not completing almost seems to accelerate as the end run draws close.

Exploring road-blocks

A wide range of issues can impede the planned progress of a research study. While some of these may have been envisaged in the risk planning discussion, others may suddenly impact on the study. The dilemma is magnified where case studies or longitudinal or pre/post testing is planned.

The following issues have been a common experience for many candidates.

Aspect	Issues
Participants	• Failure to secure organisations to participate in the study • Failure to secure individuals to participate in the study • Loss of vital field study contacts with an organisation • Industry research partner moves employment • Organisation closes down, merged, or is taken over • The organisation refuses continued access
Costs	• Travel cost become too inhibiting • Survey cost become too inhibiting
Data collection and data	• Tested instruments cannot be used • Very limited returns to surveys • Interviewees remain very silent • Participant responses are at odds with a priori framework
Sensitivities	• Ethical dilemmas arise • The organisation refuses the publication of confidential data • Outcomes are too commercially sensitive for publication

D1.3 Assessing options to address identified roadblocks

Once roadblocks have been identified, the supervisor has a key role in producing alternative options and guiding the assessment of the best possible option for a given situation. Inevitably, it is here that the experience of the supervisor can be used to expand the student's frameworks and ensure that there is a logical alignment between the purpose of the study, the data collection and the desired outcomes. These discussions broaden the candidates understanding of research projects.

Often proposals may be too idealistic and the supervisor needs to explore if the candidate is experiencing saturation and redundancy with fieldwork. In many cases, the supervisor has to help the candidate confront the issue that what was planned cannot now be achieved and what alternatives are available that are compatible with, and are unlikely to dilute the intended study.

The following thinking frame may be used with the candidate and supervisor preparing for the discussion.

Issue	Alternative Strategies	Impact on Study	Preferred Options

D1.4 Developing contingency plans

At the start of the field study period or after the proposal acceptance, the supervisor can guide a discussion about what could go wrong and how likely it is to go wrong – a risk management discussion. Mapping the critical issues in the project and being aware of these issues enables a proactive discussion about contingent action and generates a series of 'what if' explorations placing some 'plan B' actions on the agenda ready for eventualities. This is not a negative approach, as it involves the candidate in widening their research experiences and developing their capabilities of research planning.

Providing examples of how previous research studies have been changed by field-work issues may be a good introduction to such discussions.

Research Phases (Determined by Discipline of research)	Potential Issues	Impact on the Study (High/Medium/ Low)	Chance of Occurrence? (High/Medium/ Low)	Plan B Options
Recruiting Organisations or Participants				
Materials and equipment				
Maintaining relations				
Data Gathering				
Transcription				
Ethical issues				

D1.5 Addressing student-suggested changes to data and approaches

As the study progresses, the supervisor also plays a critical role in resisting changes and additions that are offered late in the project timeline. Often students, with a much deeper conceptualisation of the study than at the time of their proposal, gain new understanding, new references, and new concepts that they would like to incorporate into the project. Here, the experience of the supervisor is critical to resist sharp changes in the study purpose or to introduce new material that may be interesting but is a diversion from the stated purpose of the study. Of course, there are also Eureka moments, when new conceptualisation or an additional theory may be assessed and incorporated, necessitating the realignment of the core of the thesis and bringing a dramatic improvement to the quality of the study.

Supervisors need to first determine the value of the new data or approach and then to assess how it can be incorporated and what else must change as a result. The following questions may form a basis for discussion.

- Is the new data additional or radical?
- Is it imperative that the study incorporates the new data?
- Does the study need the new data?
- How will the new data add value to the study?
- Is further learning and exploration necessary?
- Is further data collection necessary?
- Where does the new data fit in the study?
- What is the simplest addition for the new data?
- How do the parts of the thesis need to be adapted as a result?

D2.1 Issues in data collection

Consider the table below. Do you agree or disagree with its statements? Is there other material you could add?

Data Sources	Data collection methods	Points to consider
Performances	• Live viewings (notes, scores, photographs, audio or audio visual recordings, collected items) • Viewing of recordings	• What data comes from the performer? • What data comes from sources other than the performer(s) • Will any people, non-human life forms or environments be harmed in, by or as result of the data collection process? • Can data only be gathered at specific time(s) and place(s)? How long will/ must data collection take?
People and organisations	• Observation (notes, scores, photographs, audio or audio visual recordings, collected items) • Interviews (notes, scores, photographs, audio or audio visual recordings, collected items) • Surveys (in-person, on paper, online) • Focus groups (in-person, online) • Social media • Study of records (includes published and unpublished print/online/ microfilm materials and data, photographs, audio or audio visual recordings, collected items, artworks, artefacts) • Experimentation	• Will any people and/or organisations be harmed in, by or as result of the data collection process? • Will, can or should this data be anonymised? • Will analysis be qualitative, quantitative or use mixed methods? • Can data only be gathered at specific time(s) and place(s)? • How long will/must data collection take?
Non-human life forms	• Observation • Study of records/specimens (includes published and unpublished print/ online/microfilm materials and data, photographs, audio or audio visual recordings, collected items, artworks, artefacts) • Experimentation	• Can data only be gathered at specific time(s) and place(s)? • Will any non-human life forms or environments be harmed in, by or as result of the data collection process? • How long will/must data collection take? • Will analysis be qualitative, quantitative or use mixed methods?

Data Sources	Data collection methods	Points to consider
Places	• Site visits (may involve notetaking, photographs, audio or audio visual recording, collecting items) • Study of records (includes published and unpublished print/online/ microfilm materials and data, photographs, audio or audio visual recordings, collected items, artworks, artefacts)	• Can data only be gathered at specific time(s) and place(s)? • How long will/must data collection take? • Will any places be harmed in, by or as result of the data collection process? • Will analysis be qualitative, quantitative or use mixed methods? • Can data only be gathered at specific time(s), place(s) and circumstance(s)?
Non-living things	• Observation (may involve notetaking, photographs, audio or audio visual recording, collecting items) • Study of records (includes published and unpublished print/online/ microfilm materials and data, photographs, audio or audio visual recordings, collected items, artworks, artefacts) • Experimentation • Design and construction	• Can data only be gathered at specific time(s) and place(s)? • How long will/must data collection take? • Is any harm likely to be produced during or as result of the data collection process? • Will analysis be qualitative, quantitative or use mixed methods? • Can data only be gathered at specific time(s) and place(s) or circumstances?

D2.2 Gaining and securing research partners

Once a direction and target has been agreed, there are two practical questions to be addressed at the start of a field based research journey:

- Will you go wide or will you go deep?
- How will you get your data? (From who, where and when?)

While some students will be crafting artifacts, accessing secondary data, or setting up experiments, those involved in examining social and business practices need to recruit participants, and often clusters of participants for case studies. In these cases, the study will be strongly mediated by the process of gaining and maintaining those external relationships.

The researcher should be made aware that it will be necessary to market the study to practitioners and to focus on what benefits they may gain from the study. Each potential participant may require a different approach to secure access. Maintaining the relationship requires a planned program of interactions to ensure that access is continuous where longitudinal data collection and pre and post testing is required.

Consider:

- Which benefits will appeal most to each potential research partner?
- What (e.g. Interim reports, Evaluations, Literature reviews, Field reports, Seminars, Workshops, Presentations) can the researcher offer as part of the Quid Pro Quo arrangement?

More specifically, consider the issues tabled below.

Issue	Considerations
Engagement with research: rationale for organisations	The organisation will benefit from: • research material that offers a more independent evaluation of strategy, implementation or practices within the organisation. • immediate feedback from leading edge research within the organisation. • gaining increased focus on strategic issues that are important for cultural development. • having additional capability to gain and analyse feedback for organisational development practices. • having additional capability to prioritise options for strategtic change initiatives, and present those options to the executive. • research serving as a symbol of commitment to research and learning.
Engagement with research: rationale for the project leaders	The organisation project leaders and managers will benefit from: • involvement in a research project enhances the profile of the associated internal initiatives within the organisation. • accessing current ideas and literature in the area. • securing an organisational commitment to a long term development activity that may be leveraged to secure and develop local resources. • an opportunity to develop supportive network research links with managers in other organisations. • being involved in leading edge workplace research and learning that supports personal development

Issue	Considerations
Engagement with research: rationale for the organisational staff	The organisation staff: • will benefit from the "Hawthorn Effect" of interest being shown in their endeavours, and from being linked into the wider picture. • will benefit from being able to contribute and voice their perceptions on organisational issues. • might benefit from associated seminar run by the researcher?
Engagement with research: rationale for wider social benefits	At the wider social level it provides the opportunity for managers to: • contribute to the understanding and development of strategies that can improve business activity. • develop their profession and professionalism.

D2.3 Systems for managing research information

Much of the work of a researcher involves reading, writing and record keeping.
It becomes very important to develop systems for recording, storing and retrieving information and keeping track of the drafts being developed.

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Step 1. Check whether your student has a workable system for keeping track of:

- short notes on readings, database searches and ideas (perhaps a comprehensive diary or a set of hardcopy or electronic journals or notebooks, each with a particular purpose, or use of citation database such as EndNote),
- meetings with supervisors, topics discussed and outcomes,
- work undertaken, data collected and analysis,
- thoughts and ideas related to the research project,
- tasks to do on a daily or weekly basis, and
- literature searched, read and reviewed.

Step 2. If the student does not appear to have adequate systems in place:

- highlight the difficulties that may arise from the absence of adequate systems for managing research information, and
- discuss how the student can obtain support to assist with the development of appropriate systems.

D2.4 Securing valuable data

Many research students have not previously been involved in long and complex projects. While the emotional management of the journey is complex, the operational management of the project has one primary imperative – the security of data. While from an ethical perspective, data security remains a primary researcher responsibility, many students will be unaware of just how much data they will accumulate and how vital, and often irreplaceable that data is.

There are a wide range of stories concerning student losing the precious materials that were to be the basis of their thesis. Broken recorders, faulty hard drives, stolen computers, damaged hard copies, lost files and mice have all led to distraught candidates, who after losing time to depression have to salvage what they can from what is left. Recorded conversations are irreplaceable, as no conversation is the same twice and often it is impossible to return either to a location or a person. Experience indicates that there appears to be a high correlation between the importance of data and the possibility of that data being incomplete.

A significant role of the supervisor before data collection is to ensure that the student has a sound management plan in operation for the data collection period ahead. The burnt house will be rebuilt, but the lost data will end a four-year study. Most students will never have experienced the complexity of very large documents with multiple figures, tables and chapters. This not only places the student in unknown territory, where problems and losses can occur after long and late working, but also pushes computers and their systems towards their capacity instigating further possibilities of data crashes and loss.

While the conversation and advice will inevitably be specific to the disciplinary area and form of Higher Degree being undertaken, the following issues should be central in an active discussion about data security.

- What plans have been made for keeping a copy of all data in a second location (secure offsite storage) for the duration of the study?
- When data is being collected in other locations, what plans have been made to copy the data, so it is secure through two modes of transit?
- Where interviews are being recorded, will the student have two recorders available to ensure that the problems of power loss, human error and malfunction are minimised?
- If hard copy data is being collected, what measures will be taken to ensure there are copies of key data at another location or that the key data has been digitally reproduced immediately through photographs or into text for use in the thesis?
- If the study involves artefacts that cannot be reproduced, what plans have been made to ensure they are secure from theft damage and fire?
- Where the study involves access to organisations and external locations for the collection of data, what risk management plan has been devised in the event of loosing that relationship or access?
- What strategies is the student following in terms of digital backup of all project materials to storage in two other locations (secure offsite storage)? How frequent are these backups (e.g. at least a weekly backup of electronic files and perhaps daily backups during busy data collection, analysis and writing phases)?
- Is the student aware that the act of transcribing interviews and summarising hard copy documents immediately ensures that the data is in two formats. In addition, the quicker this is done, the better the interpretation?
- What protocols have been agreed between the student and supervisor in regard to sending a keeping thesis drafts and how are the changing generations of such files going to be labelled and coded to ensure consistent transfer and storage?
- Where can the student get appropriate training or guidance in how to manage and process a

complex word document with templates that ensure a consistent textual presentation?

- Where students have personal or work issues that require a long period of lay off form the study, what has been done to ensure security of data at this time?
- Remember: Technological change can often render a storage system incompatible with future systems in a relatively short period of time.
- Over a long part time study, it can often be very difficult to locate data from several years previously. Does the student have a clear system of labeling the data, hard copy and digital, so they can locate each section of data easily?

D2.5 Exploring options for analysis

Most research proposals are very specific about the direction of the study and the proposed data collection processes. However, while the mode of analysis is often indicated, the reality is that at the initial stages of a research study, it is not possible to know what the study will generate or encounter and therefore a prescriptive analysis process is often a fiction.

The process of analysis is often created or reconstructed as the candidate reviews what the study has been able to gather or create. Analysis is the least predicable part of the proposal. The discussion that takes place between the supervisor and student researcher when the data collection, experimentation, investigation or artifact generation has been completed is a very critical interaction for the completion of the candidature. In many ways it is about drawing a deep breath before embarking on the final phase of the candidature.

The supervisor needs to remind the candidate what is left to achieve. Usually the candidate will have been writing up the early parts of the thesis, as they have been progressing the study. It is at this stage that a discussion can begin about what can be added into the final text about the research process and method now that that part of the study is nearing completion. Often by this time the candidate may either be under time pressures to complete or increasingly wanting the end to come. It is vital that a period of reflection and planning precedes this final phase of the work.

This final stage of the study consists of two main acts:

- a overall review of the research that has been done;
- reflection about the worth of that research and the contribution it makes to the stock of knowledge.

The distinction between the two perspectives is worthy of discussion to separate the first overview of what the study found, from the subsequent interpretation of that same data.

Remind the student that in many thesis structures, these two acts form linked chapters:

1. a findings chapter providing the narrative overview of what the study to present the reader with a detailed summary of the process and practice.
2. a chapter presenting the key issues, phenomena and relationships emerging from the study that are the central achievements and contribution of the study to academia and for practitioners or wider society.

The findings chapter is often a review of what the study found, gathered or experienced, so that the reader can gain an appreciation of what happened in practice. This may be a narrative of the cases, events, interviews, performances, creative acts, experiments, or descriptive statistics. The aim is to give the readers a feel for the totality of the exploration, so they have a thorough understanding of what the study encountered and the evidence that now exists and will be the basis for the subsequent discussion and analysis.

The thesis moves on to focus on the meaning, discovery and key concepts that can be found in the discussion or interpretation chapter, which moves from the previous statement of what occurred to focus on the key issues, the phenomena and relationships that appear more enduring and stronger, and that have the greatest utility in terms of adding to our knowledge.

If the findings indicate what the study has done, this discussion or interpretation section responds to the question so what does it mean? This section often interweaves the key issues of the study with existing knowledge to indicate how the study contests, confirms or extends existing knowledge. This chapter pursues the highest cognitive processes described in Bloom's Taxonomy (1951); analysis of critical phenomena, the synthesis of those phenomena and how they relate to each other, and the

evaluation of the phenomena to indicate which appear to be the most critical.

Whether reflecting on statistical tests, participant interviews, graphic statements, created artifacts, life stories, or laboratory experiments, it is in the discussion or interpretation chapter that the thesis indicates what has been the primary production of the study, what phenomena or relationship is most instrumental, and what is the key contribution to knowledge. This is also the section where the author returns to the driving purpose and research questions or hypotheses and makes a final response to the task that was set some years previously.

D2.6 Developing evaluation capability

Most PhDs are involved with the issue of evaluation. Some research studies are designed to specifically evaluate educational, social or organization initiatives. They evaluate an initiative, technique or concept or be involved in evaluating the worth of actions of the participants or of the researchers in a situation. They also constructing frameworks to determine the changes, impact, worth or value of people, animals or events.

Evaluation usually consists of three phases:

1. an assessment of the resources associated with a project,
2. an assessment of the processes and impact of a project, and
3. an assessment of the validity of the project and the alternatives available.

Research studies inevitably produce a great deal of data and students are often overwhelmed by the significance of what they have uncovered. A discussion about evaluation and placing a value on activity can prepare student to:

- determine what should be the central focus of their thesis
- determine what material should be discarded, and
- be able to justify their actions.

Supervisors can equip students to prepare for their study and its analysis phase by:

- reviewing the instruments and approaches that are available to them, and
- exploring the frameworks and theories that may be relevant, and
- discussing approaches to assessment and evaluation.

Assessment is the process of placing a value on individual change, while evaluation is the process of determining the impact of initiatives in relations to the resources involved and the alternatives available. While some studies are specifically involved evaluating initiatives and change processes, most studies reflect on what has been achieved by the research and the impact it may have on a range of stakeholders and indeed the researcher themselves. This assessment is often outlined in the review of the limitations of a study.

Evaluation may focus on three aspects of the project: the context, the content, and the impact. Each project context is unique and a discussion about the various options below will ensure that a model tailored to a specific study is developed for that situation.

Evaluation Aspects	Considerations
Context evaluation	• The Strategic Need • The alignment with current Policies • Programme Intent – desired outcome • Participant capability/ capacity • Participant commitment • Resources available
Content - internal evaluation	• Knowledge, skills or attitudinal objectives • Time allocated • Methods used • Interactional activities chosen

Evaluation Aspects	Considerations
Outcome – impact evaluation	• Change in learning achieved • Change in subsequent behaviour achieved • Organisational impact • Business impact • Professional impact • Social impact

D3.1 A 3-step strategy for brainstorming chapters

This tool asks supervisors to imagine they a supervising a student, who:

- is completing a thesis dealing with achieving reconciliation in post-conflict communities,
- has **"How effective have been the different models/processes for achieving reconciliation in post-conflict communities in the post Cold War era?"** as the guiding research question for the thesis,
- has done some research,
- has a proposed chapter outline (shown below), and
- has written some text—including text for a proposed chapter on post-conflict Bosnia-Herzegovina, which comes in the middle of their proposed chapter outline.

The student's proposed chapter progression

1. Chapter on meaning of 'reconciliation' (conceptual/ theoretical/ what's in the literature), as a base point for the description in subsequent chapters of how different models have been applied in a range of contexts.
2. Chapter on Pacific islands, e.g. attempts within the state at achieving reconciliation in Bougainville and Fiji between different ethnic groups.
3. Chapter on East Timor: international intervention; role of UN; creation of new state.
4. Chapter on South Africa: focus on Truth and Reconciliation Commission (with end of chapter providing a summary of what the Truth and Reconciliation framework has achieved in South Africa as a segue for the following chapter on Bosnia, where the Truth and Reconciliation Commission model has been advocated as a way forward).
5. **Chapter on Bosnia: Range of models attempted and adapted. (The chapter could start by linking with end of preceding chapter by indicating that the Truth and Reconciliation Commission model has been one of a number of approaches that have been considered for achieving reconciliation in post-Dayton Bosnia. Other approaches to be considered in this chapter will be developed in this brainstorming exercise. The chapter might conclude that many unresolved issues remain with all of the models tried in Bosnia, to provide a segue with the next chapter.)**
6. Chapter on indigenous Australia (opening with issue of lack of success of models that have been tried).
7. Chapter: Towards a new model. This could build on the best elements of the various models described in previous chapters. Could identify continuing problems. (Might consider a SWOT analysis approach.) Linking back to conceptual chapter, could elaborate on the need for any reconciliation model to bridge the social and the personal—e.g. ability to deal with the need for reconciliation within discrete communities (individual villages in Bougainville, Fiji, East Timor, SOWETO, Bosnia, an outback Australian settlement).
8. Concluding chapter (philosophical, speculative) on the need to recognise and deal with instances of irreconcilability.

Supervisor step 1: Review the known elements

What ideas and information does the student already have to include in the chapter—what are the 'known elements'? This example assumes that the student has some knowledge of a range of approaches that have been mooted for achieving reconciliation and has some specific knowledge relating to:

- Jacob Finzi's Truth and Reconciliation Commission proposal
- War Crimes Tribunal
- Trial of Milosevic
- Keeping factions separated (= maintaining Dayton)
- Issue of how to change 'irreconcilable' differences?

Supervisor step 2: Listen, question/ push/ probe/ lead/ provoke
The supervisor's role at this point is to actively listen to and question/ push/ probe/ lead/ provoke the student into articulating the known elements as fully as s/he can. T The supervisor can play the role of a scribe – pushing the student to elaborate and jotting down their responses on the whiteboard or butcher's paper.

Brainstorming leads to a series of questions and suggestions for the student to follow up in additional reading, research and reflection. Imagine an exchange along the following lines:

- Re Jacob Finzi's Truth and Reconciliation Commission proposal
  Supervisor: What are the defining characteristics of Finzi's model, compared with the South African model? If you can specify, say, three defining characteristics, each could constitute a paragraph.
  How was Finzi's proposal received in Bosnia? Have others suggested variations? What are the practical reasons that people have mentioned for their reservations? What are the principle reasons—e.g. justice should be meted out by the War Crimes Tribunal? Are there theoretical or epistemological reasons for concern, e.g. connected with the nature of memory?

- War Crimes Tribunal
  Supervisor: What are the competing models here? What are the distinguishing features of the Hague system? What have The Hague hearings resulted in to date? What is the evidence for the hearings contributing to/ detracting from reconciliation?

- Trial of Milosevic
  Supervisor: What was the range of opinion within Bosnia on Milosevic's trial?
  You could outline the reasons for support for and opposition to the trial among sections of the population, and whether people viewed it as a step towards achieving reconciliation.
  Perhaps you could then provide a narrative of key points of the trial and trace reaction in Bosnia at the time.
  Narrative could end with death of Milosevic. What issues did the death leave unresolved?
  Does the individualising of the issue by focusing on one person come at the expense of more systemic responses (such as reform of the education system)?

- Keeping factions separated (= maintaining Dayton)
  Supervisor: Dayton represents a territorial 'solution', with partition meant to be an interim measure.
  Given that it's still in place, has it hindered attempts at reconciliation by separating the communities?
  What are its key features?
  What are pros and the cons recommending it as a solution?
  What of the broader geo-political context?
  For example, are there suspicions of the motives of neighbours like the Greeks, or superpowers like Russia or the US, or the backers of the Bosniaks?

- How to change 'irreconcilable' differences?
  Supervisor: Does the partition approach represent the old 'Balkans ethnic hatred' mindset?
  What are the sources for this mindset? How is it perpetuated? Whose interests does it serve?
  Does dealing with the processes by which the mindset is reproduced offer a way forward—e.g. by reforming education and history books or encouraging greater local identification rather than religious-ethnic. Is there a role for the diaspora to play here? Do you need to question the

assumption underlying the thesis, namely that reconciliation is possible? Should you allow that this might not universally be the case—that in the light of what has happened irreconcilability might be unavoidable?

Supervisor step 3. Review the possibilities for inclusion in the chapter outline

The student now has many suggestions to follow up, to establish what might (or might not) be useful for their chapter—which might now include the following points (which could be written as a series of sequential paragraphs):

Jacob Finzi's Truth and Reconciliation Commission proposal compared with the South African mode

- Main characteristic of Finzi's model
- Another defining characteristic
- Third defining characteristic
- Reception of Finzi's proposal in Bosnia
- Suggested variations on Finzi's model
- Practical problems with model
- Reservations on basis of principle reasons—e.g. sidesteps delivering justice
- Issues of memory being (re)constructed in a particular way

War Crimes Tribunal

- Different models
- Distinguishing features of the Hague system
- What the Hague hearings have resulted in to date
- Evidence for the hearings contributing to reconciliation
- Evidence for hearings detracting from reconciliation

Trial of Milosevic

- Opinions within Bosnia on M's trial
- Reasons for support for trial
- Reasons for opposition to the trial
- Issue of whether such trials help or hinder achieving reconciliation.
- Narrative of trial
- Death of Milosevic
- Issues left unresolved by death
- Issue of individualising of the issue detracting from more systemic responses (such as reform of the education system)

Keeping factions separated (= maintaining Dayton)

- Reasons for Dayton: interim territorial 'solution' based on partition
- History of continued partition
- Key features
- Pros and cons of separation
- Impact of partition on reconciliation at state level
- Impact of partition on reconciliation at community level
- Broader geo-political context for partition: taking into account Serbia, Greece, Russia, US, Muslim backers of Bosniaks

How to change 'irreconcilable' differences?

- Partition reflecting old 'Balkans ethnic hatred' mindset
- Sources for the mindset
- How mindset is perpetuated

- Whose interests are served
- Possibility of addressing the processes by which the mindset is reproduced
  E.g. through reforming education
  E.g. through re-writing history books
  E.g. through encouraging local community identification over religious-ethnic.
- Possible role for the Bosnian diaspora
- Raising possibility that reconciliation might in some cases not be possible

Through this process, the original 5 ideas have expanded into around 40 related points – a substantial basis for a chapter.

D3.2 Writing effective introductory and concluding paragraphs

A chapter's introductory paragraph can serve the following distinctive functions:

- showing the relationship of the chapter to the thesis,
- introducing or signposting the block of text about to be read,
- providing a link with the preceding chapter, and
- if the first paragraph in a series of paragraphs that constitute the chapter, linking with the following paragraph.

In terms of function, a chapter's concluding paragraph parallels the four functions of the introductory paragraph, by:

- reiterating how the chapter (the block of text just read) was related to the thesis,
- providing a sense of completion or conclusion for this particular block of text,
- providing a link with the following chapter, and
- if the last paragraph in a series of paragraphs that constitute the chapter, linking with the preceding paragraph.

This tool provides examples of thesis chapters to show how these functions can be succinctly achieved, often by the use of textual markers, such as 'As this chapter argues...' or 'As the following chapter elaborates...'

This tool is designed for students, who do not understand the role of introductory and concluding paragraphs. It is not meant to prescribe what all introductory and concluding paragraphs must look like. Once they have mastered this model, students should be encouraged to experiment with other ways of introducing and concluding chapters.

Supervisors will need to go through the techniques with students, whom they feel will benefit from the tool's structural/functional approach to ensure they understand what they are attempting to achieve in introductory and concluding paragraphs. This can be done one on one or with small groups of students.

Ideally, the tool is most effectively applied when a student has completed the chapter review employing the 'Dot point strategy'. As introductory and concluding paragraphs are typically written after the body of the chapter has been drafted (so that it is known what needs to be introduced and concluded), this tool complements the 'Dot point strategy for reviewing chapters'.

When discussing a chapter with a student, supervisors can cover how successfully introductory and concluding paragraphs are fulfilling the four functions outlined in this tool. The principal outcome is a well-constructed introductory or concluding paragraph, which achieves the four functions.

Example 1: Introductory and concluding paragraphs in a chapter

The following example is from a Victoria University Master's thesis, Encircling the wind: the inscription of Chinese medicine on the Australian landscape. The introductory and concluding paragraphs are from a chapter titled 'searching for demons: the quest for balance and harmony'.

Introductory Paragraph

The preceding chapter suggested[1] that the sources for Chinese medicine are not 'static', but change over time according to the new contexts in which they are read. **This dynamic and fluid aspect of the sources of Chinese medicine can be seen in relation to the ancient medical concept of ke**[2] or possession (Sivin 1987, Harper 1982, Unschuld 1980). **As this chapter indicates**[3], the concept dates to early Chou times and has remained a key idea for 'traditional' medicine, though not in the same way. **As this chapter argues, since Chou times possession has been apprehended according to the changing contexts of social life, in terms of which it has assumed various meanings and translations.**[4]

Concluding Paragraph

By focusing on the notion of possession[5], practitioners are introduced to other ways of understanding how qi can also be an evil influence. The discussion returns practitioners to 'unfamiliar' ways of understanding illness causation and how this informs our understanding of states of being. **This chapter has shown**[6] how evil qi or possession can be understood differently at different times and still have meaning for people. **The following chapter focuses on**[7] more familiar emblematic structures such as yinyang, qi, wu xing and liu jing, giving emphasis to how true qi is said to move and change in the body. **Comprehension of these and other Chinese medical ideas builds upon the metaphor and symbols, which inform and structure discourse on the nature of qi.**[8]

Example 2: Moving from the concluding paragraph of one chapter to the introductory paragraph of the next

The following example, from Greg Gow's Victoria University PhD thesis The language of culture and the culture of language: Oromo identity in Melbourne, Australia, shows how he concludes Chapter 4, 'The mourning of a "nation" without a "state"' and introduces Chapter 5, 'Musical aesthetics and the production of place.

Concluding Paragraph

The Oromo may be forgotten, unrecognised and 'nationless' in the somewhat old fashioned sense which still informs most of the world's élite and the subjugated Oromo nationalists. Nevertheless, **in this small park in inner-city Melbourne**[9] a nation – perhaps a postmodern nation—expressed itself in celebration. **Like the gaddaa condolence ritual and the transgressive speech at the African cultural festival, it is in such collective activity that Melbourne's Oromo transform their standing**[10]. Such performances function as a virtual cipher for the carnivalesque: the elements of play, celebration, transgression and subversion enabling Oromo people to turn (momentarily) the 'natural order of things' to their own ends (Buchanan 1997b, pp. 177-8). **As argued throughout this thesis, language provides the common link in all of the performances**[11]. But what is striking in the performances, like the women's at the barbeque, **is the critical role of music. As the following chapter elaborates**[12], music serves to provide a focal point in the transformation of Oromo individuals into an Oromo nation, as the transgressive carnival moves beyond extraordinary singular occasions to the quotidian 'everyday'.

1. Links with the previous chapter.
2. Moves onto aspects to be dealt with in this block of text.
3. Signposts what's covered in this chapter.
4. Relates the chapter to the thesis.
5. Links with the preceding paragraph (which dealt with the notion of possession).
6. Concludes this particular chapter.
7. Links with the following chapter.
8. Links with the thesis (the first and second sentences linking the content of this chapter to the thesis, while the final sentence links this and other chapters to the thesis).
9. Links with the preceding paragraph (dealing with an Oromo women's barbeque at a small park).
10. Concludes this particular chapter (by reiterating the meaning or significance of what has been described).
11. Links with the thesis.
12. Links with the following chapter.

Introductory Paragraph (next chapter)

Melbourne's Oromo singers/musicians Shantam Shubisa, Afandi Siyo and Ture Lenco are displaced musicians whose identities have been largely built around their music and the Oromo Liberation struggle. **For these musicians, identity has been eroded with their displacement from rural Oromiya and the immediate struggle. At the same time, they must keep identifying with the struggle, which gives cohesion, not only to these musicians but more generally to Melbourne's Oromo community**[13], for whom it is a unifying factor. Because so many people have paid such a high price for the struggle, they cannot imagine life without it. Music feeds their imagination by providing points of connection with a rural world and the struggle of the past. Indeed, the re-creation of rural identities in Melbourne largely depends upon these musicians and their music. For many of Melbourne's Oromo, **music does not merely evoke nostalgic memories of a place now gone but, rather, serves as the primary means by which they are able to maintain connections with the land (biyya)**[14]. Via a fusion of fantasy and real bodily practices, musical activities affectively define **a space without boundaries—enabling Melbourne's Oromo to materially relocate themselves from marginalised city-bound people to city-based Oromo with rural identities.** [15]

13. Implicitly links with the previous chapter (and its themes of collective identity formation, displacement and cohesion—previously of women, now of musicians).
14. Specifies aspects to be covered in this chapter.
15. Relates the chapter to the overall thesis.

D3.3 Exploring options for constructing the findings chapter

A review of what the study entailed, explored or gathered.

Issue	Options for Discussion	Agreed Thesis Guideline
What order should the story be told?	Chronological Research phases Case by case Review of what each instrument /test uncovered Each participant's story Review each group or level of participants By responses to each field question By locations Moving from the general to the detailed specific	
What section length?	Determine section of the chapter Assess relative weight of sections – importance/ data Allocate word limits to section and subsections	
Drawing the line between direct reporting and interpretation	Indicating the numbers associated with phenomena Indicating the vocal weight associated with phenomena Indicating the strength and occurrence of phenomena Indicating cross case relationships Reporting on just descriptive statistical tests Restricting the narrative to objective statements Curtailing any commentary on events and statements	
Narrative format	Which person – 1st/2nd Which tense – active present /past What terms for 'the researcher' What format for participant names, locations, roles	
Format structure	Separating narrative from participant quotes Statistical display conventions Removing unnecessary statistical data Highlighting key data Incorporating figures, pictures, video, web links. Determining what supports in the appendix Guidelines for summary of appendices in the text	
Reviewing	Academic readers – consistent message Field practitioners – face validity of account Citizens – Plain English readability	
Other?		

D3.4 Exploring options for constructing the analysis, interpretation, discussion chapter

Focusing in on the key issues, meaning and worth of the study

Issue	Options for Discussion	Agreed Thesis Guideline
What are the key issues?	What are central themes What voices shout What issue is most vocal What is continuous and enduring What is the strong message	
How do we know?	What is the strength of the supporting evidence Where does the evidence occur When does the evidence occur Is there confirmation across cases, locations Is there confirmation across instruments Is there confirmation across different data/tests Is there confirmation across participant groups	
Criteria for focus	What criteria determine the primary issues What determines a strong issue in the data What determines a enduring issue in the data	
What order to arrange the key issues	Chronological Broad to specific Interesting to the most instrumental Practical to theoretical According to research phases According to research questions/hypotheses	
Analysis evidence	What calculations, tables and figures to place in the appendix as evidence of workings What summary to place in the main text	
Linking to theory	Separate subsequent section linking to theory Integrate theory at end of each issue Consistent format for each section Cross reference to lit review	
Creating theory	Integrating theory with each specific section Separate subsequent section linking issue to theory Reflective modeling Best practice conceptual models = practice Clear statements relational statements – theory Implications for stakeholders Addition to knowledge statements	
Responding to hypothesis or research questions	Order as first stated Order of importance Single direct answers Original interpretations /post study interpretations Multiple interpretation responses Academic/practitioner responses	

Issue	Options for Discussion	Agreed Thesis Guideline
External validation	Face value of claims validated by practitioners Face value of claims validated by academics Claims linked to existing studies and key figures	
Limitations	Reflection on process Reflection on resources Reflection on research learning Further research	
Conclusion	Determine what key issues the conclusion reaffirms What are the 30 key words/phrases describing the study What is new here What are key contributions to theory/practice What is the claim for the value of the study and method	
Other?		

D4.1 Building academic and professional networks

No student completes a research degree entirely on his/her own, but in the early months of candidature, students may not know now when and how certain people may be able to help them and their project (and vice versa). A student's most important tasks in the first year of a research degree include:

- establishing a sense of the norms and practices not only within their general discipline but also within their school, centre or institute, and
- developing academic and professional networks.

Over the course of candidature, the candidate should build up their academic network to include:

1. people who can be directly supportive,
2. people who can provide review, and
3. people who may be suitable to examine the study (these will usually be people from outside the university where the candidate is enrolled).

Supervisors may wish to draw their students' attention to:
the benefits of networking within and beyond the university as tabled below, and
the care needed to balance the end to networking with the need from timely completion of the research project.

Networking within the university where the candidate is enrolled	Networking beyond the university where the candidate is enrolled
• Joining/using mailing lists and google groups and other online networks • Checking notice boards • Subscribing to and reading newsletters • Joining student organisations • Attending events run by GRS • Attending research centre, school and faculty seminars • Using the peer support services available from the SOAR centres to develop specific or tailored skills and build a Career Development Plan using career guidance software. • Tutoring, demonstrating and/or lecturing • Working as a SOAR Ambassador • Participating in some of the leadership and professional activities that arise in the school or faculty (e.g. getting involved with a research group or in the organisation of seminars or conferences)	• Participating in professional or research associations and interest groups • Using websites and email groups to keep up to date with upcoming conferences and events in their field • Discussing possible conferences • Attending conferences and seminars, and networking amongst the local and international academic community • Presenting research work at a local or international conference sometime during their candidature. • Looking for opportunities to collaborate on papers with colleagues. • Blogging • Developing publications • Publishing journal articles during their candidature.

Remind the student that developing and sustaining these networks also serves to develop and demonstrate transferable skills in information and project management, analysis and communication.

D4.2 Systematically developing a researcher's academic network

The focus after the proposal is on data collection and analysis. It is essential that is what is often a very individually orientated period should also contain experiences that will broaden the new researcher's horizons. Developing the academic network ensures that wider discussions will feed into what can be an insular part of the project.

With a completed proposal and some initial data collection experiences, some students are ready to start disseminating their progress so far. There are a range of options that should be discussed and a program agreed according to the capabilities of the student.

Which of the following may be applicable:

- Developing a project brief for circulation
- Developing a draft paper for circulation
- Meeting reviews and other academics for coffee and questions
- Guest presentation in graduate classes
- Developing a website for the study and inviting comment
- Direct contacting of external academics with questions
- Membership of a research centre
- Finding out funding sources available for conferences
- Membership of a discipline research association or industry group
- Participation in online research blogs, forums and workshop
- Participation in self-directed PhD student groups
- Participation in Research Centre seminars
- Participation in a University PhD workshop
- Participation in a local University PhD proposals, workshops and seminars
- Participation in a national PhD workshop
- Presenting at a School, Faculty or University seminar
- Non-Refereed paper for a University seminar
- Non-Refereed paper for a local practitioner conference
- Non-Refereed paper for a local academic conference
- Non-Refereed paper for a national conference
- Refereed paper for a national conference

E. Finalising the thesis

Introduction

During this stage, examiners are nominated and the candidate finalises the written component of the research project and submits it for examination. Where students become very engaged with their fieldwork or data collection, persuading them to close that phase and move onto the final write up may be a significant and critical supervisory act. It is the supervisor's responsibility to ensure the candidate completes the thesis and submits on time.

Examiners

During this stage, examiners are nominated and it is the supervisor's responsibility to contacting any potential examiners well in advance of their formal nomination. The selection of examiners is a very important stage of the HDR process and should follow the guidelines current for the institution. Examiners for a research thesis should be selected based on their areas of research activity, expertise and reputation. They are all specialists in various theory, methods, and research contexts.

Wrap-up

At the end of the research process, all the parts of the project need to be finalised and all analysis completed and written into the thesis. Often the candidate and supervisor have different ideas of what constitutes a thesis that is complete and ready for examination. It can be difficult to convey to a student that while the first draft is an accomplishment, there will be many subsequent versions before the final draft is confirmed.

Supervisors often require drafts of one chapter at a time to avoid overload and give speedy feedback. The final thesis should, however, be read and re-read in order to establish that it retains overall coherence and consistency. While the supervisory team has a role to play in this process, university writing consultants and support staff may also provide valuable feedback. Candidates should also be encouraged to develop their own network of readers, who may not have specific academic capabilities, but can be good judges of plain English. There should be rapid and continual feedback over the final few months.

Once the supervisors and candidate agree that the thesis is ready for examination, it can be formally submitted.

Tools

The higher degree examination process focuses on the assessment of the final thesis or exegesis with the capability of the candidate as a researcher being judged by this final production. The judgment is made is made by two or three examiners reading and assessing the final work in isolation. This means:

- the selection of the examiners is critical, as they are the sole arbitrators in determining the worth of the candidates work, and
- the production of the final work is critical as it is the sole artifact that determines the result of the assessment process.

Subcomponent	Relevant tools
E1. Selecting examiners	E1.1 Selecting examiners – issues to consider E1.2 Examiner checklist

Subcomponent	Relevant tools
E2. Reviewing thesis structure, format and content	E2.1 Preliminary thesis health check (prior to proofreading) E2.2. Preparing the thesis for examination E2.3 Checklist to assist the review of the draft thesis
E3. Addressing examiners' feedback	E3.1 Considering examiners' feedback E3.2 Responding to examiners' feedback

These generic tools may need modification to better address issues relating to practice-led research and performing arts and visual arts.

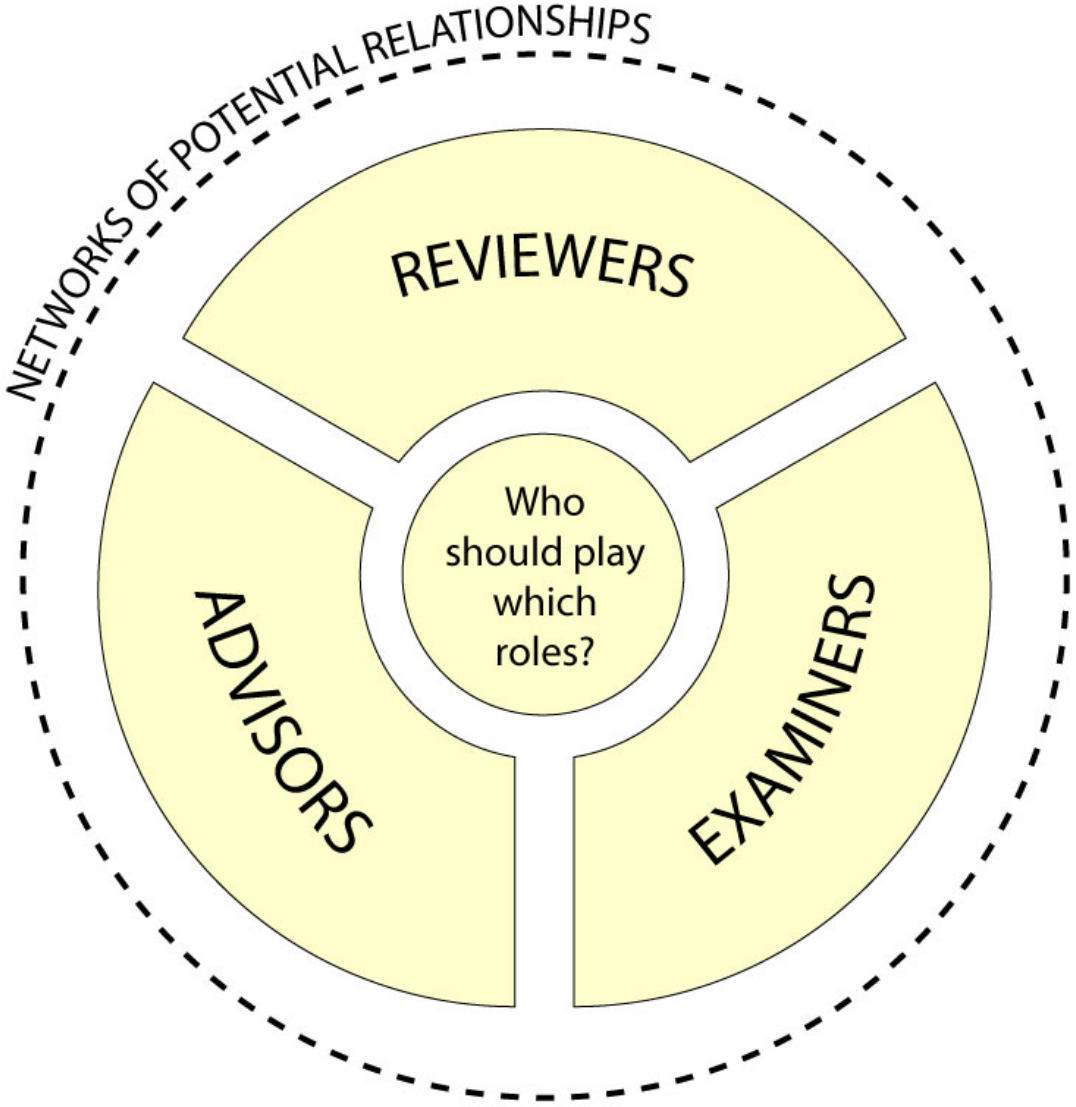
E1.1 Selecting examiners – issues to consider

The selection of examiners is a critical act, as the worth of the thesis will be determined by the examiners, not by the supervisor. Examiner selection should be a collaborative process with the candidate, by now an expert in their field, contributing a long list of options. Every thesis strikes a balance between knowledge generation and risk minimisation, exploring and learning while ensuring that the goal is achieved.

The process of selecting examiners is very much related to the perceived quality of the study and candidate. High quality work may be sent to esteemed academics in the field. More limited candidatures require carefully handling and judicious selection of examiners.

The candidate should have build up their academic network throughout the candidature generating a group of relationships that fall into three discrete sectors:

1. people who are directly supportive,
2. people who provide review, and
3. people who are suitable to examine the study.



If the third category appears to have few viable examiners, individuals in the other two groups may be able to suggest potential examiners.

E1.2 Examiner checklist

This checklist can be used to:

- assess the suitability of each potential examiner, and
- ensure that due diligence has been performed to reduce the risk of unexpected approaches to the thesis in examination.

Examiner issue	Response
Is the examiner known to the candidate or the supervisor through face-to-face or mail contact?	
Has the examiner provided advice to the candidate and given an indication of their interest to the candidate or supervisor?	
Has the examiner completed examination on time for the University or supervisor before?	
Has the examiner been asked to review current papers by the candidate or chapters by the candidate that may make make them ineligible to be an examiner?	
Has the examiner previously not completed examination on time or produced adverse examinations?	
Does the examiner have any antagonism towards the University, Faculty or academic members from past relationships?	
How does the known expertise of the examiner relate to the thesis and study?	
What are the current research interests of the examiner?	
Has the work of the examiner been quoted in the thesis?	
DO any of the study finding conflict with the examiner known positions or network relationships?	
Will a covering letter to the examiner be necessary to indicate their specific approach top the thesis in multi-disciplinary studies?	
Does the examiner require specific information about the examination process, when being brought in as a replacement examiner or an alternative resubmission examiner?	

There is a long history of examiners being unable to return thesis by the due date. In these cases, consideration should be given to the disadvantages of pursuing such examiners to conclude the examination, as they may approach the work with less than an open mind. The University does have appropriate rules in place to progress the examination, where a specific examiner does not respond in a reasonable time period.

E2.1 Preliminary thesis health check

Part 1. Overview

Description	Status	Issues

Part 2. Consistent style check (expand and adjust to reflect elements in thesis

Style Elements	Issues
Page numbering of front matter (Roman numerals except for the unnumbered title page)	
Page number of main text/references/appendices (Arabic numerals)	
Short and meaningful chapter titles	
Consistent format for chapter titles	
Clear and consistent numbering of chapters and headings	
Consistent numbering and captioning of tables	
Consistent numbering and captioning of figures	
Consistent formatting and placement of tables	
Consistent formatting and placement of figures	
Consistent text alignment within front matter and chapters	
Consistent use of punctuation	
Consistent use of upper case letters	
Consistent use of italics	
Consistent use of bolding	
Consistent use of footnotes	
Intext citations matched with endtext references	
Correct referencing format for intext citations	
Correct referencing format for endtext references	
Spelling checked	
Grammar checked	

Part 3. Front matter check (adject to reflect elements in thesis)

Document elements	Status	Issues
Title page (full title of thesis, name of candidate, name of faculty)		
Abstract		
Declaration (in required format re originality of thesis)		
Acknowledgment by the candidate of help given or work carried out by any other person or organisation		
Abbreviations used		
Table of contents		
List of tables		

Document elements	Status	Issues
List of figures		

Part 4. Chapter by chapter breakdown (adjust to reflect chapters in thesis)

Chapter	Chapter title	Description	Status	Issues
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
References				
Appendices				

Part 5. Total thesis word count

Is total thesis word count (including front matter, main text, references and appendices and footnotes) within the specified limits? Yes/No

E2.2 Preparing the thesis for examination

All candidates submit a thesis that that provides both the rationale for their research, a review of their study and findings, and an explanation of how their work extends current understanding. In some fields the thesis may be accompanied by other productions such as artifacts, performances, and public texts that have been produced as a part of the program of study.

Preparing the thesis is the last act of the candidature but the most vital. A mistake at this stage will fail to represent the lengthy work and achievements of the candidate appropriately. Unfortunately, even the most enthusiastic candidates are often tired, over emotional and aching for closure at this stage. They just want to submit. International students may be under extreme pressure to complete and submit before an additional semester's fees are due, or where a candidate is exhausted with the task.

Supervisors have the difficult task of gaining final motivation to make the thesis not just good enough, but the best it can be. Supervisors may find that candidates benefit in this period from making a presentation of their study to peers to focus on the clarity of the alignment of the thesis and the continuity of the study and argument. Vocalisation also assists in ensuring continuity on the page.

At this final stage of their research development program, the candidate needs to move from being an author to a text editor. The final text will be placed in the library and should be textually at library standard, No-one expects to take a book from the library and encounter texts with numerous typos, illogical structure, poor continuity and inconsistent design.

The candidate needs to be aware that multiple redrafts of thesis chapters are often required before the text is ready for examination. The examination will inevitably consist of making changes to the thesis as suggested by the examiners. It is far better to try and identify the weaknesses before the examination, so the work can be done before the thesis goes out to examination.

Questions to guide the review of the draft thesis.

The three key questions to be decided are:

1. Is the thesis submissible?
2. What changes are necessary?
3. What further review will be necessary before submission?

The following questions can be used to guide the review of the draft thesis.

General issues to consider
Has the thesis been professionally proof read? A proliferation of typos or inconsistencies may make examiner angry and lack confidence in the text and student's work.
Does the structure of the thesis follow the structure that is the normal pattern for the discipline? If not, is there an early justification for the structure presented?
Does the thesis require any specific issue to be addressed to the examiners in a covering letter? While the thesis may be explicit, some work may benefit from a direct information being supplied to the examiners before they begin the examination process to orientate them appropriately to the text.
Has the candidate read the ECU guidelines to examiners and completed a table indicating how their final text responds to each of the areas and questions examiners are asked to respond to? Have each of these points been suitable inserted and strengthened in the text to provide deliberate cues to the examiners?

E2.3 Checklist to assist the review of the draft thesis

The final thesis will vary in structure according to the disciplinary field that the candidate is operating within. The thesis structure will also vary according to the approach of analytical frame that the candidate has pursued. It is therefore not possible to indicate what would be a 'normal' structure for a thesis as there is considerable diversity across academic fields and changing cultural patterns as disciplines adapt to new and different approaches. However, examiners in specific fields have been schooled to expect particular general patterns in a thesis and it is critical to give a clear and early explanation if the thesis uses a 'different' structure and to provide the rationale for the approach.

While there is no 'normal' structure for a thesis, this checklist covers the areas that appear in most final texts.

Chap	Title	Signs to look for	Connections
	Title	Does the title indicate the issue, the study method, location, and the outcome?	
	Abstract	Has the abstract been proofed by several academics and finetuned to be direct?	
	Preface	Does the preamble indicate clearly that the candidate has already achieved refereed papers and has been legitimised by their peers.	
1	Introduction	Is there a clear research question and purpose? Has the question's relevance and significance been justified? Has the author taken a stance in posing the question? Does the research question indicate subsidiary questions? Has the research process and thesis structure been outlined?	
2	Literature Review	Is there a restatement of the research question? Is there an attempt to identify the concepts within the research question? is coverage of the literature related to the concepts raised, issues, gaps, and challenges? Does the discussion summarise the review Does it re-present the research question together with a justification of subsidiary questions, approach to the methodology, and the use of outcome and contribution to knowledge? Is there a conceptual framework? Does it have a theoretical base?	

Chap	Title	Signs to look for	Connections
3	Methodology	Is there is an attempt to relate the research purpose and question to an appropriate method. Is there substantial justification of the methodology – accepted literature references How clear are the connections between the question, methodology, participant selection, data collection strategies, and methods and protocols? Is the sample and unit of analysis appropriate? Is the instrument development and sampling discussed? Are pilot issues and changes in approach discussed? Is the researcher role discussed? How clear is the data analysis strategy? How will the data analysis be presented? Have limitations, validity, reliability and ethical issues been addressed?	
4	Study findings data overview	Re-statement of research question and the methodology being followed? Outline of the structure of the chapter – clear and understandable structure (use of sections) Chapter flows a logical flow of chronological events, research phases, or research interactions. Sections clearly state the situation, actions, results or data collected with a summary. Summary of the findings – main issues indicated	
5	Discussion	Re-statement of research question and the methodological stance which generated the analysis Analysis summarised as a response to the research questions Logic of analysis stages Discussion attempts to interweave analysis of findings into a theorised discussion – clearly showing how the research question is being answered and links to past findings. Discussion clearly refers to the main issues and authors in the literature review ... how the thesis confirms, extends, contests, or modifies published research Clear presentation of issues of significance – with enduring and strong influence. Direct response to the research questions.	
6	Conclusion	Summary of the thesis: restatement of aim, questions, big literature ideas, method, main findings Is the contribution to academic theory and knowledge specifically addressed? Implications for practice Implications for further research Discussion of the limitations of the research.	

E3.1 Considering examiners' feedback

The completed examination reports are circulated to the Associate Deans of Research in each Faculty and the Dean of the Graduate School. Individual assessments of the reports that are received result in the committee determining the appropriate grading for the thesis.

It is unusual for examiners to agree. In most cases, the final grading is strongly influenced by the mode or median of the examiners grading response. In some cases, the responses from more experienced examiners may be given a heavier weighting and outliers from limited examination responses a low weighting.

While candidates have to respond to all examination critique and produce a tabulated response of each issue and their corresponding action, the first review of the examination reports should not just equip the candidate to make such a response, but also indicate what responses are appropriate.

Generally, responses fall into five categories and the table below can be used as the basis for a discussion with the candidate about how to approach the response to examiners.

Response Level	Broad stance on the issue raised	Specific wording
Accepted and changed	Obvious omissions and typos	This error has been amended in the revised text.
Accepted and added text	Accepted critique that requires changes to the text or additions	The text has been amended in this area and the following reference or sentence added.
Accepted lack of clarity	Accepted that issues in the text where not clear to the reader.	The meaning of paragraph B has been reviewed and changed/strengthened with additional and amended sentences to clarify the issue as follows.
Accepted, reviewed literature and added text	Critique that requires further review and exploration to amend and add to the text	The work of x has been reviewed and the meaning of paragraph A changed with additional and amended sentences to clarify the issue as follows.
Contested	Suggestions that not seen as appropriate	This issue has been discussed with the supervisor and the joint decision was that the integrity of the thesis argument would not be enhanced by this addition.

Following the review, the candidate may wish to add an additional thanks to the examiners, as this will produce a useful audit trail for all those accessing the thesis in the future.

The candidate should also be encouraged to send thanks to the examiners and indicate subsequent publication that might interest them.

E3.2 Responding to examiners' feedback

The Australian examination process normally requires the written input and appraisal by 2 or 3 examiners, each acting independently of the other/s. This provides no opportunity for the examiners to jointly agree on the overall result or the changes that are required, as occurs in more open panel-based examination processes. In Australia, making the final determination of the satisfactory finalisation of the examination is seen to be the responsibility of the University through the work of those with designated academic responsibilities, such as the senior academic who has been given the responsibility of 'chairing' the examination process, the Dean or Director of Graduate Research and, in most cases, also of a review panel or committee.

This examination process can be extremely confronting and academically and emotionally challenging for both the candidate and their supervisor/s. Effectively the work of all is being examined, and it is comparatively rare to have completely positive responses about every aspect of the work from all examiners.

As many candidates' are focused on getting the thesis finished so they can move on, their initial inclination may be to engage only minimally with the examiners' more critical feedback. The process of taking on board the examiners' feedback, making reasoned decisions about final changes and formally responding to each examiner's critique can, however, provide much extremely valuable learning for the candidate. Unless the candidates has some experience with dealing with journal peer review, this process may be the first time that the candidate has had to:

- confront detailed written blind review and critique of their work, and
- make decisions about how to respond and defend their responses.

The stance you take as a supervisor in working with your candidate to review the examiners' reports and make decisions about how best to respond to them is extremely important. Peer review and critique is integral to academic life and it is your responsibility to model a constructive, respectful and academically robust approach to examiner feedback. As you have learnt to do with your own work when you receive peer feedback, you need to demonstrate how you distance yourself emotionally from any negative critique and consider it as dispassionately as possible on its academic merits. What has the examiner said? On what basis have they made these comments? What can you actually learn from their response? How justified are they in your view, and, if you believe one or more of the comments are not justified, on what academic grounds are you arguing this?

The following step-by-step process can assist supervisors to work through examiners' reports to finalise the thesis:

Step 1. Know your university's examination policy and processes

Make sure that you have read your University's policy on examination and have a clear understanding of the key players in the process of finalising the thesis examination, including of what is expected of you and your candidate and the paperwork that is required.

Step 2. Clarify the overall result

If you are not clear about what the overall recommendation for the thesis is, then clarify this with the Chair of Examiners or the Examination area for Graduate Research thesis. Assuming the result is Passed (with a designated level/s of changes) or Deferred, you can proceed to Step 3.

Step 3. Prepare for a meeting to agree on revisions

Ask the candidate to prepare for the meeting by reviewing the examiners' reports prior to the

meeting and identifying what they believe each examiner is asking to be amended in the process of revising the thesis. Using the Response to Examiners template below assist with this process and helps the candidate focus on the first column, Examiner's Required Amendments, for each examiner.

Template for responding to examiners

Candidate name:
Student ID:
Thesis title:

Examiner 1: [Name of examiner, of released]
Examiner Recommendation: [Examiner's overall recommendation here]

Examiner's required amendments	**Page numbers in original thesis**	**Comment** (including justification if an amendment is not proposed to be made or will be handled in a different way to what proposed)	**Revisions made** (include the page numbers in revised thesis)

Examiner 2: [Name of examiner, of released]
Examiner Recommendation: [Examiner's overall recommendation here]

Examiner's required amendments	**Page numbers in original thesis**	**Comment** (including justification if an amendment is not proposed to be made or will be handled in a different way to what proposed)	**Revisions made** (include the page numbers in revised thesis)

Examiner 3: [Name of examiner, of released]
Examiner Recommendation: [Examiner's overall recommendation here]

Examiner's required amendments	**Page numbers in original thesis**	**Comment** (including justification if an amendment is not proposed to be made or will be handled in a different way to what proposed)	**Revisions made** (include the page numbers in revised thesis)

Step 4. Conduct the meeting

Discuss the reports and reviewing any amendments the candidate has identified as being required. Depending on how clearly the examiners have presented their reports, you may need to have quite a bit of discussion about what amendments are required/expected by the examiner vs. more general comments and critique for the candidate. Come to agreement on the required amendments, and discuss whether and how these will be made.

If the list of required amendments is relatively short and/or straightforward, it should possible to agree on the changes, and draft responses (Comments column) in the same meeting. Where the proposed

amendments are extensive or complex (e.g. where different examiners recommend conflicting approaches), you may want to arrange a further meeting and ask the candidate to review and draft comments and proposed responses and bring these to the next meeting for finalisation.

Use the 'Comments' column of the template to provide the academic response to the examiner's feedback. This can include the academic justification (e.g. a counter argument or alternative position) for not adopting the examiner's required amendment at all and/or why an alternative approach to making amendments is proposed.

Step 5. Review full response and final thesis version

Once the candidate has completed all the agreed changes, carefully review them both for their content and from an editorial perspective to ensure that you are fully satisfied with the revised version of the thesis and the associated paperwork summarising the responses to examiners. If you are not completely satisfied, then keep working with the candidate to support the revisions until it is ready. Once you are satisfied, you can arrange with the candidate for the revised thesis to go forward for final classification through your university's processes.

F. Managing progress

Introduction

Undertaking any research degree involves a range of activities that all contribute towards the creation of a final research thesis object, be this a traditional thesis or a creative work with an exegesis. The research project, like other projects, can benefit from the use of project management principles to sequence and accomplish the various tasks that are associated with its undertaking.

A reoccurring theme of workshops to discuss the dilemmas of HDR supervision is that motivated, high achieving, self managing students tend to manage the relationship themselves and that the tools and experiences collated in this resource book are really about focusing supervisors on the complexity of managing HDR students, who fail to take charge of their study and personal development.

While it is a privilege to be able to support and mentor students at this level of learning to discover new knowledge, managing candidate performance is one of the primary supervisory responsibilities. While supervisors should be critical friends, they are also process protectors. This involves guiding the candidate through the institutional maze while ensuring that the resources of candidature are being well spent and risk managing the eventual return on resources. One supervisor voiced the dilemmas of managing process as exploring 'when to stop being nice'.

Taking appropriate account of student diversity

The difficulty for supervisors is that every student situation is unique, so previous experiences often do not prepare supervisors for future issues and dilemmas.

Given the length of candidature and the diversity of students, it can take a considerable time for supervisors to become conversant with the phases of an HDR candidature, let alone the multiplicity of issues and events that can occur. This is why collegiate discussion is so valuable, as it can short circuit the learning process through using the experience and experiences of others.

Managing consumption of candidature

Ensuring that HDR students progress their studies in a timely fashion is a primary supervisory role. During the research project, there is a constant need to monitor the candidate's progress and confirm that they are on track as per the schedule that had been outlined in the original contract. This is done through regular formal meetings and managing consumption of candidature. Managing the time allowed for HDR students to complete their study is at the core of each semester's reflection on student's progress.

Keeping track of each student and their consumption of candidature is crucial and a critical supervisory role. Each institution has clear guidelines about the timely completion of HDR candidatures. Candidates who do not complete their candidature within these timeframes with be deemed overtime and will be required to apply for an extension to candidature. These candidates use more resources and supervisor time. Both the supervisor and the institution should be risk managing each candidature and minimising the waste of resources that occurs when candidates fail to complete. This means having supervisors and systems that recognise warning signs, take action and move to an early closure for all concerned.

The supervisor should take note of any warning signs that the candidate may be veering off course or encountering difficulties, which could cause the project to extend beyond the original allocated time. These warning signs include:

- continual topic changes/drifting away from the research question,
- missed deadlines and frequent extensions,
- a lack of ownership on the part of the candidate, and
- a prickly relationship between the candidate and supervisor.

Taking action when progress is not satisfactory

Supervisors always hope that students will manage their studies and reports on student progress can record satisfactory progress in terms of quality and quantity, so that their study will be completed within the allocated time period. External events, life changes, academic barriers, fieldwork relationship breakdowns, and work pressures can all inhibit progress and the supervisor may have to indicate that progress is marginal, when compared to the agreed timeline. In such cases, there needs to be a discussion about:

- an amended timetable,
- how the barriers can be addressed, and
- what will happen if this fails to take place.

Supervisors have to feel they are part of culture that views confronting a lack of progress as a positive action, that can put a candidate back on track towards a timely completion. Agreeing that there has been marginal progress is an important tool with which to manage candidate student performance. Sheltering the student from such a reality is a failure to manage the candidature. If a candidate does receive a marginal progress report, it should not come as a surprise, but as a reflection of a lack of actual progress according to what had been outlined in the research proposal or agreed on in the candidate-supervisor contract. The focus is then on the plan for the next semester, not the previous lack of progress.

Tools

As shown below, this component has three specific tools.

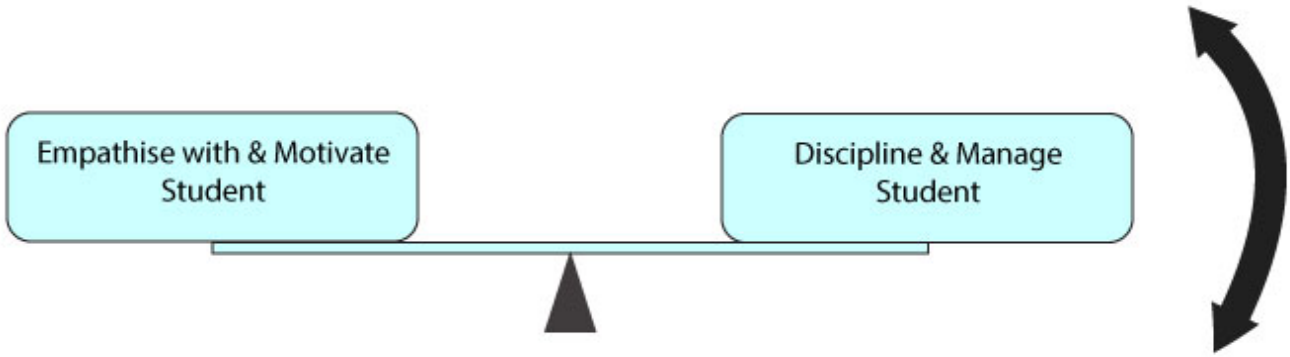
Component	Relevant tools
F. Managing Progress Some of the Component B tools may also be relevant	F1.1 Managing and motivating progress during candidature F1.2 Mapping a timeline F1.3 Case of a stalled student – can't progress, submit or complete F1.4 If progress is marginal...

F1.1 Managing and motivating progress during candidature

Supervising higher degree research students is a privilege and the pinnacle of an academic career. We aim to attract good students, encourage them to enroll and work with them to keep them on track. However, our desire to support may cloud our ability to manage. This can cause problems when a student appears to be making little progress and efforts to motivate the student must be balanced with efforts to manage the student. It is also important to intervene early whenever progress appears 'at risk', so that poor behaviours/practices do not become entrenched and thus harder to resolve.

Students may stall in the final stage of their research degree for a variety of reasons – not least because they simply cannot let it go. Their supervisors have to:

- read the signals,
- confront the issue, and
- develop an appropriate changed pathway.



Consider how best to balance management and motivation action in the scenarios tabled below.

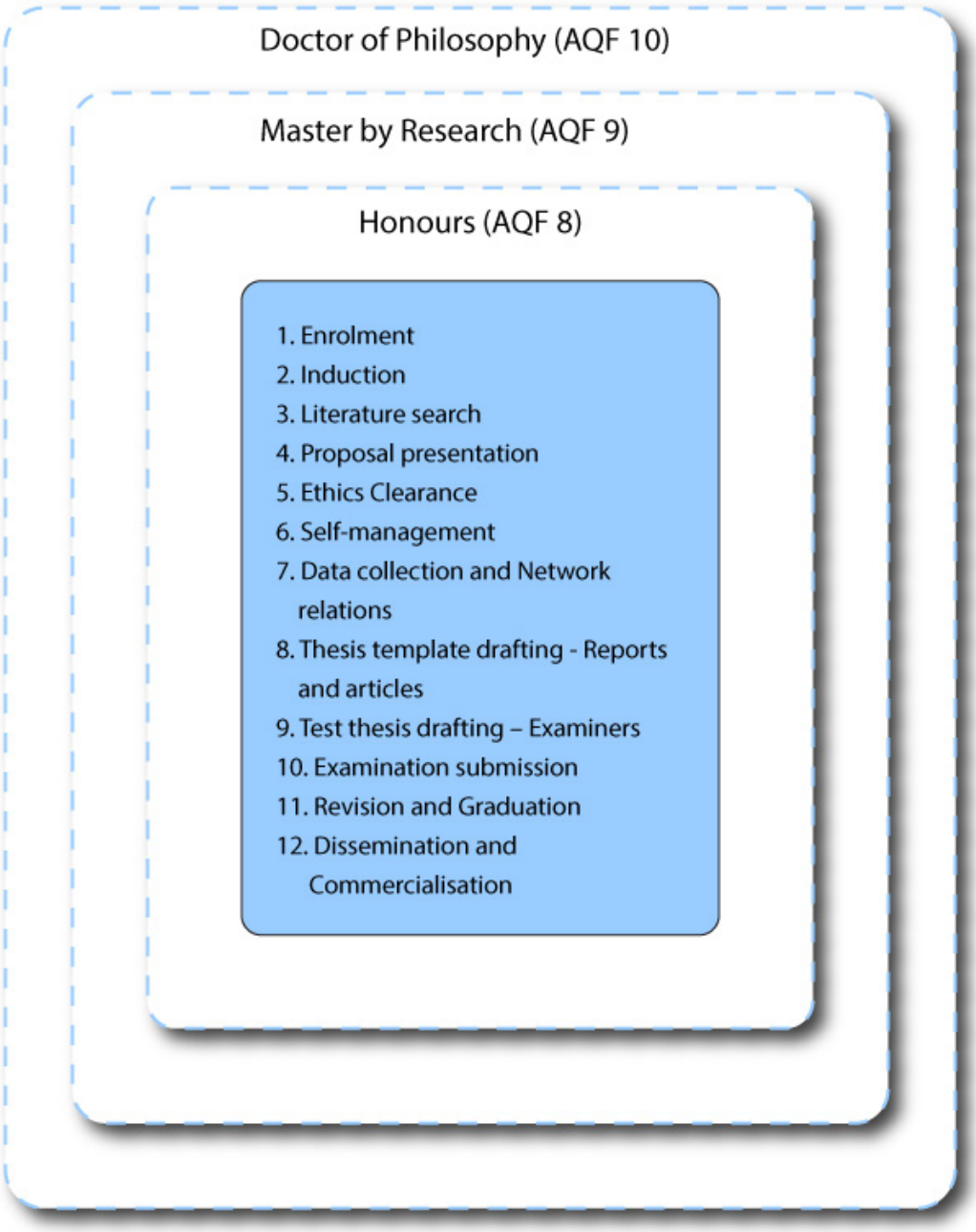
Scenario	Management action	Motivation action
Exploring national indigenous parks is the focus of our student's study. He is planning his proposal and has done a wonderful literature review, when an opportunity to go on an expenses-paid short trip with visiting North American academics exploring national indigenous parks arises. He has no complete proposal and the offer means he has to leave next Monday without even starting work on his ethics clearance. What are the stages of our action plan?		
Candidature has been achieved and ethics clearance granted, but data collection seems to never start and the student has run out of puff.		
After a bright and enthusiastic start, the candidate fails to keep appointments and produce work.		
Our African student has to rush back to Nigeria for a family illness. She must also return for data collection, but she is not yet prepared for this and needs more work on the survey instrument. However she will need to use this time at home, while she has the opportunity, to generate much needed data for the study. What should we do? The student is paying $14, 000 in fees each semester and progress is vital. List the key objectives for our action and the way we would attempt to action them.		

Scenario	Management action	Motivation action
A very relevant conference is being held locally and our student has never written a paper before and has only just started data collection. How do we support the development of what will be a first ever publication at a conference? What is the range of support we can muster?		
While in data collection, our student has a chance to take a senior position. He wants to take a year out of the study – what do we agree? List the tensions you are trying to balance and how you will try to realise each objective.		
The data collection had shown continued promise, but begins to continue on and on. Several additional stages are added to the original proposal and there does not seem to be an end in sight.		
Our top research student, a finalist in the Three-minute Thesis competition is being posted to interstate with promotion for the next year. How will we keep the process going and not lose a high quality student? Outline the options and the components of any action.		
After completing three chapters, we hear nothing from our student for four months except a series of distant emails, but a chance meeting indicates she has been given lecturing work by another part of the university, has started a new job and buried her parents during the past year. What are our options and what are the imperatives embedded in the action we take?		
Having written conference papers, our student begins the final write-up of the thesis, but after two versions of chapter one, it seems confused and repetitive with several sentences lacking clarity and meaning. What may be the issue – how do we investigate – what actions should we take?		
After three years of effective progress, our student stops sending a meeting agenda before we meet and then starts to cancel appointments, finally breaking down in tears in our office about her lack of progress. What are our immediate and medium term considerations and what sequences of actions would we put into place?		
Other scenarios relevant to motivating and managing students apparently making little progress with their research projects?		

F1.2 Mapping a timeline

Preventing HDR projects drifting is a fundamental supervisor task. Supervisors can:

- explain the stages of the candidature by walking their students through the usual milestones and actions of a HDR candidature as diagrammed below,
- ask students to produce their own customised time plan for the study with the milestones from the diagram allocated to the months ahead,
- use the students' time plan to manage progress at the end of each semester, and
- encourage the student to take responsibility for managing the research project.



F1.3 Case of a stalled student – can't progress, submit or complete

This is a sadly common occurrence for less experienced supervisors.
Consider the case below and whether it could have been handled differently or handled better by the supervisors.

Over the years Alex has been a good and a bad candidate to supervise. At every critical stage of progression, Alex seemed to dawdle. Alex was 6 months late submitting the first draft to Chris and kept attending supervision meetings saying it was nearly ready but not quite and then diverting the conversation on to trivial matters. It was only when Chris said they'd have to report to the Associate Dean Research that Alex was no longer making progress against the scholarship criteria, that Alex actually got moving again.

Alex's scholarship has now expired. Alex is 6 months past the expiry date and there is still no sign of the final thesis for submission. The last draft Chris saw 7 months ago was good and Chris wanted Alex to submit it after making some final minor amendments. Alex has since cancelled some tutorials and attended a couple where Alex claimed to be doing some rethinking on major chunks. Chris thinks these are unnecessary and may weaken the thesis overall.

Why has this situation occurred?
Do you agree with each of the reasons listed below? Are there other factors that may have contributed to this situation?

- The doctoral process and the thesis may have come to represent so much, that the fear of failing is too great to contemplate for Alex to contemplate. By not submitting it for examination, Alex is avoiding anyone being able to make this judgment on him/her.
- Towards the end of candidature, the candidate can feel very deflated about the thesis produced. Even though it may be good enough to pass examination, the candidate may no longer value it and be reluctant to submit it for examination. Alex may be feeling unsure about the work and whether he/she actually wants to submit it.
- It is also not unusual at the point of submission for the supervisor to be uncertain as to whether or not the thesis is good enough to pass. New supervisors in particular struggle with this.

How can the situation be recovered?
Do you agree with each of the proposed action steps tabled below? Are there other steps that could help?

Proposed step	What's involved
1	Ask the Associate Dean Research or another trusted, experienced colleague/examiner to read the thesis for both you and the student to offer an 'external view' as if they were the examiner. If they agree it is ready to submit, then it should be submitted. If it helps, get the Associate Dean Research to feedback to Alex that it is good enough to go,
2	Alex needs help to keep this situation in perspective. It is important to point out to Alex that this is a doctoral thesis and that is all that it is. It is not Alex's life work nor is it Alex's identity; it is simply a piece of research written up as a thesis for the purpose of doctoral examination. The core issue at the heart of the problem here is one of failing. What if Alex submits and fails? Point out that if this does happen (which is exceedingly unlikely on first submission), then it is the piece of work that has failed, not Alex as a person.

Proposed step	What's involved
3	If Alex did get a scholarship, there may be a bit of leverage in insisting that a submission is made as part of the scholarship terms, but essentially this is about Chris telling Alex that he/she has more confidence in the thesis than Alex has himself/herself. It's a matter of trust.
4	If all else fails, Chris could threaten to withdraw supervision support from Alex on the basis that he has had enough and the thesis is ready to submit. Otherwise there is a danger that Chris gets drawn into years of tweaking with the thesis that ultimately ends up detracting from its value rather than adding to it.

F1.4 If progress is marginal...

In the light of your University's policies and guidelines regarding marginal progress by HDR students, consider the cases tabled below and decide on the best course of action in each case after considering:

- Is there sufficient evidence or risk of marginal progress?
- What needs to be done and documented?
- Who needs to be notified, involved?
- Which lines of enquiry are appropriate and likely to be useful?
- Any there any special issues dealing with student who are rarely or never on campus?
- Any there any special issues relating to international students or scholarship students?
- Any there any helpful strategies to adopt for future contact with this student?
- Any there any measures that a member of a supervisory team can take to avoid or be better prepared for involvement in such cases in an immediate, short-term or longer-term timeframe?

Case	Outline
1	By the middle of the semester, it is clear that the student's data collection plan has run into problems and the student is unlikely to meet the agreed milestones set for that semester's work
2	A part-time PhD student has acquired new outside work responsibilities, keeps promising to get back on track with the PhD and failing to do so
3	The student has made good progress to date, but is now being stymied by unexpected actions taken by an industry partner
4	An associate supervisor is astounded to hear that the principal supervisor is thinking of awarding marginal progress to their cosupervised student
5	A determined, capable and pregnant student insists she is fit and able continue working on her thesis, but the quality of her work has become far from satisfactory
6	The parent of a child recently diagnosed with a terminal disease is now missing agreed deadlines and submitting work of far from satisfactory quality
7	A student who was full of enthusiasm at the beginning of candidature appears to have lost interest in the thesis topic and approach and has ceased submitting work or responding to emails from supervisors
8	An international student, who has always struggled with the English language is now submitting work that no member of the supervisory panel finds intelligible
9	A student keeps redesigning a survey instrument rather than using it to gather data and is likely to miss the agreed deadlines for data collection
10	A student has been hospitalised for an extended period during the semester and submitted very little work
11	A full-time PhD student on scholarship has become so focused on part-time tutoring roles, that there is no longer any energy or enthusiasm left for the thesis
12	A student has become fixated on a particular thesis chapter and insists on rewriting it again and again, even though this produces only marginal improvement and there is now very little time left to work on the other chapters, if the thesis is to be submitted within the required timeframe

Finally, having considered those 12 cases, how would you now define 'marginal progress' and what do you see as the best ways of dealing with it?

Complete the table below to summarise your current framework for dealing with the sets of symptoms that you recognise as defining 'marginal progress'.

Observed symptoms and signs of marginal progress	Strategies of inquiry Who, what, how and when	Duty of care for the student	Staff protection issues	Relevant guidelines/ frameworks

G. Managing relationships with the student

Introduction

The relationship between the supervisor and the candidate is one of utmost importance. It requires a balance that enables the supervisors to play mentor and guide without leaving the candidates feeling pushed in directions they do not want to take. Conversely, supervisors also need to view their candidates as up-and-coming researchers in their own right, who may still need advice on how to proceed and should not be left to find their way through the research process without support.

Any difficulties arising within the supervisor-candidate relationship must be dealt with in a manner that minimises conflict. Patterns of good and bad supervision can be studied. It is also important for supervisors to:

- know how to deal with candidates from different cultures special interest groups and those working at a distance, and
- take an interest in emerging technologies that can aid in supervision and research.

The mentoring role

Mentoring is part of the ongoing supervisor responsibilities that take place throughout the research process. Supervisors are advised to aid the candidate in developing a positive and confident self-image in terms of research capability. This means helping the candidate to plan a research career, inform and encourage them to apply for scholarships and to nurture and support them while making sure their work is of an acceptable standard. Mentoring is always about helping the protégé to see the broader picture and to introduce them to the network that will secure their position there.

Nurturing and supporting the HDR candidate

One important aspect of the supervisor's role is nurturing and supporting the HDR candidate during the research process. In this area, the supervisor can:

- Stimulate and maintain student motivation
- Reaffirm the significance of the work
- Encourage attendance and presentation at seminars and conferences
- Involve with the school/faculty community
- Be aware of personal and financial issues
- Take an interest in their future careers!
- Promote research culture and community

The supervisor should also provide feedback and help the candidate develop positive self-esteem, Candidature is full of doubt – make students feel positive every time they leave a meeting. This is often done through management of advice and criticism. However, there needs to be a balance of praise and criticism - any sub-standard work should be pointed out to the candidate and should not be blindly approved.

Dealing with difficulties

In any relationship, there will be moments where conflict can be a problem. The same is true with the Supervisor-Candidate relationship. Supervisors should be aware that a higher degree is a significant challenge and reflect on the pressure and strains that it placed upon them and their relationships to achieve completion. Sometimes logical student reaction may be displaced by emotional student reactions. While every means necessary should be employed to minimise conflict and the negative impact on the research process, in some cases, it may be inevitable. In such circumstances, options to be considered include:

- ensuring you include your co-supervisors in the discussion,

- discussing the issue with your colleagues and line managers for supervision,
- ensuring you have collated all the necessary evidence about progress and issues,
- preparing well for face-to-face meetings to explore the situation, the evidence and options,
- aiming to achieve a mutually agreed outcome, and
- being prepared to refer the student to an appropriate additional party, if a resolution cannot be achieved.

Tools

As shown below, this component has several tools.

Component	Relevant tools
G1. Relationships with students (see also: Module 3 of GRIP)	G1.1 What constitutes a good student-supervisor relationship? G1.2 Helping your students get to know you G1.3 Effective supervisor-student communication G1.4 Evaluating supervisor-student interaction G1.5 If the supervisor-student relationship is not working well G1.6 Assisting students with the emotional aspects of their research journey G1.7 Case of a supervisor doing the student's work G1.8 Case of a student apparently impervious to feedback G1.9 Case of a student continually crying in supervision meetings G1.10 Case of a student breaking down G1.11 Dealing with abnormal/unacceptable student behaviour
G2. Mentoring and developing researcher identity	G2.1 Building personal researcher capability G2.2 Managing the mentoring relationship G2.3 Prioritising the current mentoring roles G2.4 The editing relationship

G1.1 What constitutes a good student-supervisor relationship?

The supervision relationship is an intense relationship. The interaction and discussion is at the level that people normal only experience between close friends. While this can be a very fulfilling part of the interaction, it also makes playing the equally important managing role difficult when there may be great emphasis on the mentoring mutual knowledge discovery role associated with supervision. Supervisory panels often help to avoid or breakup what may be over-intense relationships.

Do you agree that good supervision often involves and poor supervision often lacks:

- 'hands on' supervisory practice,
- on time completions,
- an explicitly negotiated firm timetable for completing candidature taking account of:
  - available support and project logistics,
  - institutional quality checks,
  - project-specific milestones such as the production of thesis text,
  - the presentation and publication of conference and journal papers,
- supporting the student with clear advice,
- giving the student clear, timely feedback,
- monitoring student progress,
- praising the student appropriately
- using good interpersonal skills to nurture the student,
- encouraging the student's skill development,
- encouraging the student's use of central resources and research centres,
- providing the student with access to a network of scholars and examiners,
- identifying non-performing students, and
- using the Marginal Progress option to highlight and address a lack of student progress in the absence of extenuating circumstances.

Do you agree that:

- supervision is not telling your student exactly what to do and how to do it – it is guiding them to work this out for themselves,
- supervision is not an exercise of power – it is a privilege to have a PhD student trust you to guide them through their PhD process and should not be abused,
- supervision is not an exact science – there is more than one way that a student can complete a PhD, and
- supervision is not the same for every student – PhD students have different needs that may require different inputs from the supervisor.

What else could you add to this list?

G1.2 Helping your students get to know you

Your success as an HDR supervisor will depend to a great degree on how well you and your HDR students know each other and get along. You might suggest a new student:

- reads some of your publications as a way of becoming familiar with your communication style, expertise, current research interests and the research methods and techniques you have used, and
- talks to some of your other HDR students about:
  - how they work together with you – formal meetings, informal chats etc,
  - what they discuss in meetings with you,
  - what they are expected to do between supervision meetings,
  - their tips on getting the most from meetings with you, and
  - any strategies discussed in GRIP that they have found effective.

G1.3 Effective supervisor-student communication (adapted from GRIP Module 3)

Ideally, supervisors take a number of steps to ensure that they communicate effectively with HDR candidates. These may include:

- allowing sufficient time to discuss the project and related matters with each student,
- limiting distractions and interruptions during meetings - for example, having phone calls diverted,
- being explicit about expectations, roles and responsibilities,
- ensuring the student understands and supports the agreed approach to the research topic,
- listening attentively and, if necessary, paraphrasing to ensure understanding,
- providing feedback on ideas and work in positive and constructive terms, and
- keeping records of plans, decisions and work to date.

To help to ensure that communication is effective in supervisory meetings, supervisors can also consider what they and their students are communicating by:

- body language (e.g. do you face your student and maintain an 'open' posture, lean forward slightly to signal alertness and maintain eye contact)
- tone of voice (As this cancan communicate as much as what you say, try to maintain a friendly, responsive and engaged tone).
- level of formality (Notice whether your student responds using the same level of formality, when you speaking formally or informally. Remember some international students may not be familiar with colloquial expressions and may also be uncomfortable about using a supervisor's given name and prefer to their supervisors as 'Dr xxx' or 'Professor yyy'... rather than as 'Judith' or 'Brian').

Finally, try to interpret questions or comments from your student in the best possible light. If necessary, ask specific questions to establish the student's level of performance or knowledge.

If there are communication difficulties...
Here are some steps you might consider taking, if you and your student have some difficulty understanding what each other says (e.g. if either of you speaks English with an accent that the other isn't used to):

- using the relevant feature of MS Word to annotate soft copies of your student' work to avoid any difficulty regarding interpretation of your handwritten comments,
- agreeing that both of you will try to speak a little more slowly and avoid or explain any unfamiliar different words,
- encouraging your student to record the conversation, so that it can be replayed later,
- asking your student to email some key questions to you before each meeting, and
- encouraging your student to seek support and advice from the SOAR centre, other relevant support services and from other postgraduates in your School, who might have experienced similar difficulties.

G1.4 Evaluating supervisor-student interaction (adapted from GRIP)

The relationship between a student and their supervisor is complex. It changes over the period of candidature and across the stages of the research project. It must accommodate the student's growing expertise and various contingencies, including changes in personal circumstances.

It is inevitable that this relationship will experience ups and downs – times of synergy and times of strain. You need to take a holistic approach to evaluating your relationship with your HDR students and accept that some aspects will not be as strong as others. Nonetheless, it is important to monitor the supervisor-student relationship and take steps to improve things that are not working well.

As a way of evaluating a specific supervisor-student relationship, answer Yes/No to the following questions:

- Can you understand your student?
- Does your student understand you?
- Is conversation in supervision meetings relaxed and comfortable?
- Do you have enough time allocated for supervision meetings?
- Is the feedback you receive from your student positive and constructive?
- Are supervision meetings free of interruptions?
- Do you feel comfortable asking questions of your student?
- Do you feel comfortable discussing problems with your student?
- Are you able to interact effectively with your student through email?
- Are you satisfied with the amount of responsibility your student is taking for the research project and professional development activities?

If you answered "Yes" to 8 or more questions, this is a good sign that you are building a good working relationship with your student and are in great shape for getting the most out of your supervision meetings.

If you answered "Yes" to 5 to 7 questions, consider raising some of the concerns you have identified with your student and attempt to work through them in your next supervision meeting. Remember to reflect on ho you and your student differ in learning styles, roles and responsibilities

Answering "Yes" to 4 questions or fewer is a sign that your interaction and communication with your student may need some work. Try to raise some of these issues directly with your student. Also consider using some of the options discussed in GRIP's Module 3 for addressing the underlying problems you are having with your student.

G1.5 If the supervisor-student relationship is not working well

If you feel the student-supervisor relationship isn't working well, is it because the student appears to waste your time and expertise by:

- not asking for advice,
- asking for advice and then ignoring it,
- presenting you with ill prepared written work, or
- doing work that indicates lack of the required skills?

If this is the case, then make sure the students have a clear understanding of whether you:

- welcome early drafts and open-ended discussions, or
- expect them to work at a problem or piece of writing as far as they can alone and then, after feedback or advice has been offered, demonstrate that they have given it appropriate consideration.

If you have done everything you feel you can to make the relationship work effectively, but are still not happy with the supervisor-student relationship, act on your concerns. Consider the following options:

- Talk frankly with your student and other members of the supervisory team about your concerns, expectations or frustrations. Remember to use 'I' language (e.g. 'I feel ...', 'I would appreciate...', 'in my opinion...'). Avoid 'you' language (e.g. 'you think...', 'you are never prepared', 'you said...') as it will always sound accusatory
- Talk with the postgrad coordinator, or adviser within your school or research centre. This person will have experience in the common concerns or difficulties that affect postgrad supervision and may be able to advise or assist.

If you think changes to the student's supervisory arrangements may be required to address the risk of the student making no more than marginal progress, make an appointment with your Head of School, or Faculty Associate Dean (Research) or discuss this.

While not a step to be taken lightly, it is possible to make changes to supervision arrangements if the supervisor-student relationship is not a good fit. When despite best efforts of all parties, the supervisor-student relationship is still not working effectively, you may be able to arrange appropriate alternative supervision, or add an additional supervisor, perhaps from a different school. If the project has crossed into a different disciplinary area, the student may benefit from changing schools or having another school represented on the supervisory team.

G1.6 Assisting students with the emotional aspects of their HDR journey

Regardless of the nature of the PhD and the student's background:

- PhD students experience positive and negative emotions at various stages of candidature, and
- the PhD can be seen as an 'emotional rollercoaster'

The following summary of the emotional states student experience during their research journeys tabled below is drawn from work by Morrison-Saunders et al., (2010) [16].

Stage	Student's emotional state
Early phase of the PhD	The student will potentially experience both positive and negative emotions – elation and enthusiasm, mixed with bewilderment, confusion and anxiety (the latter may be due to certainty around choosing a topic and focus in some disciplines)
Middle phase of the PhD	Procrastination and a drop in productivity are common during the middle period, when the student may feel frustration, boredom, guilt and loneliness/isolation – due to growing realisation of the size of the project, the rigours of data collection, conflicts with employment and family and the essentially individual nature of the PhD in some disciplines. Positive emotions (such as excitement at data collection and making progress) can be tempered by fear, frustration, loneliness and a sense of feeling rushed/running out of time
End stage of the PhD	The student may experience strongly felt negative and positive emotions, such as: frustration, anxiety, boredom, panic, elation and satisfaction Frustrations and tensions can occur in the relationship between supervisor and student, e.g. due to concerns about receiving timely or critical feedback, the imminent cessation of scholarship funding etc. While submission of the thesis provides some grounds for celebration, a long wait for a result may feel like an anticlimax

Suggested strategies

It is important to reassure the student that these emotional responses to the PhD journal are normal and are likely to be shared with many other PhD students. If the student raises emotional matters beyond these apparently normal patterns (e.g. matters relating to particular personal, family and other issues), the supervisor may want to provide the student with the contact details of the University's student counselling service.

Consider suggesting that the student keep a reflective journal of their emotions, so that they can track and respond to them. Outcomes you should observe include:

- greater commitment to and productivity with the PhD project, and
- student is happier and better able to cope with the PhD.

16. Morrison-Saunders, A., Moore, S.A., Hughes, M., and Newsome, D. (2010). Coming to terms with research practice - Riding the emotional rollercoaster of doctoral research studies. In P. Thomson & M. Walker (Eds.), The Routledge doctoral student's companion: getting to grips with research in education and the social sciences. New York, NY: Routledge. Available from: http://researchrepository.murdoch.edu.au/

Consider initiating questions and discussions about the emotional state of the student by asking questions such as:

- How are you feeling about the PhD?
- Have you had any emotional issues with the PhD that you would like to talk about?

The response may:

- indicate emotional state or phase the student is in, and
- provide an opportunity to implement one or more of the seven following strategies adapted from work by Morrison-Saunders et al., (2010) :
  1. Encourage your student to participate in informal student networking with their peers (as they often experience similar emotional states and can support each other).
  2. Suggest the student avoid working at home, if isolation is a problem
  3. Help the student carefully plan a timetable for work.
  4. Suggest that within the constraints of ethics approval, the student enlist some voluntary help with fieldwork if relevant.
  5. Suggest the student builds regular breaks and holidays into their work plan
  6. Keep the communication pathway open about emotions.
  7. Be aware of the possibility of conflict in the supervisory relationship.

At the next meeting with the student, allocate time for joint reflection on how the strategies worked to address emotional concerns. This can be repeated at any subsequent meetings, where emotions become apparent/important.

G1.7 Case of a supervisor doing the student's work

Consider the case below and whether it could have been handled differently or handled better by the supervisors.

Chris has only been supervising for a year. While Alex is the first student Chris ever supervised, Chris is now also supervising two other students.

Chris is an Associate Supervisor and the Principal Supervisor in all cases is a senior manager in the university and a professor, who doesn't have much time to give to the students. In essence, Chris seems to be doing more of the supervision, than the principal and Alex has started to rely on Chris for this support.

Alex now meets with Chris every week or two for at least two hours. Alex is pleased to have Chris as a supervisor and tells Chris that the support is great.

Over the last couple of months, Chris has realised that the amount of work s/he is doing prior to supervision meetings is often greater than the amount Alex is doing. For example, Chris is looking for readings/references for Alex, pre-reading and correcting Alex's written work, negotiating access to the sample. Alex is almost managing Chris as a research assistant, rather than respecting Chris as a supervisor.

For a similar case, go to **www.youtube.com/watch**?v=0huhVOLRJSE

Why did this situation occur?

Do you agree with each of the reasons listed below? Are there other reasons that inhibited development of a more appropriate and productive supervisory relationship?

- Chris wanted Alex to 'like' him/her rather than respect him/her as a supervisor,
- Chris had not set clear boundaries or guidelines to how each will behave in the supervision relationship,
- Chris had responded to the positive feedback by trying even harder to please Alex to keep up the good impression,
- Alex lacked a clearly understanding of the Research Higher Degree process, and
- Chris was unsure of his/her abilities as a supervisor and hence over-engaged in order to ensure they don't fail.

How can this situation be recovered?

Do you agree with each of the proposed steps tabled below? Are there other steps that could help to make this a more appropriate and productive supervisory relationship?

Proposed step	What's involved
1	Chris needs to arrange for the Principal Supervisor to come to the next couple of supervision meetings and provide guidance and support in remedying the situation. If this course of action is followed, Chris should then only meet Alex with the other supervisor present, rather than meeting Alex without another supervisors present.
2	It is not too late to review the current boundaries and have a meeting with Alex to establish new parameters. Alex needs to be made aware of the nature of a research higher degree and the role of the supervisor. (Some of the Component B tools might be helpful in addressing these boundary issues)

Proposed step	What's involved
3	Alex may not be aware of how much the weight of the relationship has shifted. Simply making Alex aware of the difference between what Alex has done in the last few months and what Chris has done might surprise Alex and get him/her to shift his/her behaviour.
4	Chris needs to become much better at time management. Supervision meetings need to be for an hour only, have a fixed agenda, and have agreed pre-work from Alex. Chris should only be reviewing new work, not rewrites of everything every time.
5	Finally, Chris may want to join an action learning set or community of practice to share their experience and get support and ideas from others who may be in similar situations.

G1.8 Case of a student apparently impervious to feedback

This is a common scenario for newer supervisors with students who are approaching the middle of their candidature.

Consider the case below and whether it could have been handled differently or handled better by the supervisors.

Alex has sent Chris drafts of chapters 1-3 to read. These are the introduction to the thesis, the literature review and the methodology chapter. Chris is dismayed. The chapters don't hang together at all. The literature review is a good read in itself, but doesn't really relate to the research question and the conceptual framework developed is not going to be useful as a means of framing the analysis of the data that Alex is now collecting. While the introduction outlines a context that might have been relevant when they started two and a half years ago, times have changed. The world has now progressed so much that the introduction is now sadly out of date.

Chris is worried there will now not be any unique contribution to knowledge and has spent the last year pointing out this particular concern to Alex. Alex has not listened and has been unwilling to shift his/her research question to ensure the unique nature of the research. Alex seems to want to prove something for some purpose, rather than to undertake an original piece of research, and wants a PhD for doing so.

Chris meets with Alex to feedback his/her concerns. Chris bluntly tells Alex that the PhD is heading in the wrong direction and might fail. Alex bursts into tears, blames Chris for not giving adequate supervision and storms out to go and file a complaint.

Why has this situation occurred?

Do you agree with each of the reasons listed below? Are there other reasons that may have inhibited development of a more appropriate and productive supervisory relationship?

- In the early part of the supervision process, Chris lacked the confidence to be firm with Alex about the nature of the research question and its appropriateness for a PhD. As in most cases that result in this type of situation, better management of the research question itself could have avoided this pain.
- Alex has not 'heard' the feedback, that Chris has given for some time, but Chris has not been aware of this. If Chris had emailed Alex with a clear summary of key concerns at the end of every tutorial or asked Alex to send a summary of the key points from each supervision meeting then that the feedback would have been clearly documented and given Alex no grounds for complaint.
- Chris has not 'used' the principal supervisor on the team effectively. Chris should meet quarterly with the rest of the supervision team to ensure they are all in agreement as to how the candidate is progressing and the appropriateness of the PhD.
- Chris may not have been as clear at giving feedback to Alex as he/she thought.
- Alex may have been struggling and known that the work was not good enough. Alex may even have heard the feedback and taken it on board but not known how to improve. To save face, Alex would rather blame the supervisor, file a complaint and drop out than admit to not producing work of the required standard.

How can this situation be recovered?

It is important in this situation to remain focused on what a positive outcome is. This is a difficult hurdle for Alex – it's not about Chris, it's about Alex.

Viewpoint	Potential positive outcomes
Alex	A sense of being listened to and supported may be a sufficiently positive outcome to prevent Alex proceeding with a formal complaint. A bigger, longer-term positive outcome is for Alex to continue and complete the Research Degree.
Chris	May believe the most positive outcome is for student to leave or for Chris to leave In the short term at least, the support of another supervisor could enable Chris to continue supervising this student.

Do you agree with each of the proposed action steps tabled below? Are there other steps that could help to make this a more appropriate and productive supervisory relationship? Are any of the Component B tools relevant here?

Proposed step	What's involved
1	Chris should go and make the Principal Supervisor, the faculty's Associate Dean Research, his/her immediate line manager and the Director of Graduate Studies aware of the situation. Providing forewarning of a likely complaint coming enables all parties to prepare themselves to address it and allow Chris to rehearse his/her side of the story and document it as the response to the complaint. This will also indicate to everyone that Chris is: • taking the situation seriously which will also act in his/her favour, and • reflecting on the situation and questioning his/her own practice. Admitting these mistakes early on can make them easier to rectify.
2	Chris should not meet Alex alone again. Depending on the situation, one of the above people should meet with Alex in a public place (e.g. a coffee shop) for an informal discussion of the issue that has arisen to see if they can bring Alex back to the table. If possible Chris and the Principal Supervisor should have another supervision meeting with Alex and go back over the feedback that Chris was trying to give. A follow-up supervision meeting should then be set to review Alex's response to the feedback once he/she has had time to reflect on it. In essence, if possible, carrying on with the supervisory relationship as normal while ensuring that there are always a minimum of 2 supervisors present (and perhaps even an independent mediator) present
3	Chris should collect all documentation and evidence they have of the supervision process in preparation to responding to a formal complaint should one arise. Chris should also document all interactions with Alex from this point forwards. If a formal complaint is made, Chris will need to provide all this documentation to the investigator.

G1.9 Case of a student continually crying in supervision meetings

Consider the case below and whether it could have been handled differently or handled better by the supervisors.

Alex has been working with Chris as supervisor for nearly 3 years now. Over the last 6 months, they have been meeting on a monthly basis as Alex starts to write up the thesis. Chris has been reviewing the text online and making comments in the margins using Word and also using track changes, and sending these comments back to Alex to look at prior to any meeting so that the meeting time is used to discuss any feedback comments that Alex is unclear of.

At the last two meetings, Alex has started to cry and Chris hasn't quite known what to do. The first time it happened, Chris ended the meeting and took Alex out for a hot chocolate to make him/her feel better. They spent an hour in a café chatting about life, but didn't resolve any of the issues in the thesis. The second time, Chris tried to stick it out and asked Alex what was wrong. Alex said he felt Chris was picking on him/her and being overly harsh with the comments. Chris said s/he hadn't meant to and that maybe s/he was wrong in some of the comments. In other words, Chris backed off criticising Alex's work and left him/her with the impression that it wasn't as bad as perhaps the comments by Chris had suggested.

Now Chris is dreading the next meeting as s/he has again been fairly critical of Alex's work, but knows the examiners wouldn't pass Alex's thesis in its current state.

Why has this situation occurred?

Do you agree with each of the reasons listed below? Are there other reasons that may have inhibited development of a more appropriate and productive supervisory relationship?

- Chris may have been too friendly with Alex in the past and not critical enough of Alex's work in the early stages of the candidature. This has led Alex to both a false sense of security in the work being of a high enough standard, and a sense of confidence in his/her development. These are now being shattered by the critical feedback.
- Most students reach a point during their candidature when they seriously question whether they are good enough to do a doctorate and whether it is all worth it. It is a real low point for them mentally and often they can become quite depressed (clinically). The doctorate challenges the core of who they think they are and their self-esteem, self-confidence and self-efficacy. Alex has reached this point.
- Chris may be completely unaware of something else that may be going on in Alex's life. The recent negative feedback from Chris might be the straw that is breaking the camel's back – so to speak. If this is the case, then Alex can neither hear nor deal with the feedback from Chris at the moment, and there is a danger that Alex will drop out.

How can the situation be recovered?

Do you agree with each of the proposed action steps tabled below? Are there other steps that could help to make this a more appropriate and productive supervisory relationship?

Proposed step	What's involved
1	As people often behave with more restraint in public places than in private offices, consider holding supervision meetings in a coffee shop or other public space whenever a student is likely to get very upset during the meeting.

Proposed step	What's involved
2	Check what is going on for Alex. Ask if there is something else in Alex's life at the moment that is hindering Alex's ability to take this feedback. Explore whether Alex needs to take a break or to work to a slightly less pressured schedule for a while
3	Let Alex know you are concerned that s/he is struggling so much with the recent negative feedback. Explore what the issues are for Alex and see if you can get Alex to understand what s/he is finding so hard and deal with it better.
4	Make it very clear to Alex that it is the piece of work that you are criticising, not Alex as a person. If appropriate, make sure Alex knows the details of the student counselling service and suggest that maybe it would help her/him to talk to a counsellor to help with the stress and anxiety.
5	Reassure Alex that this is a normal step in the candidature process and that you have every success s/he will come out of this with a successful doctoral thesis. Let Alex know that you still have confidence in her/him and that you are in it together for the long haul. Try to break down the steps to be taken into small bite size chunks so that Alex can start to get measures of success.
6	Pass the crying Alex a box of tissues and continue with the conversation about the work – avoiding it does not get through the tears barrier!

G1.10 Case of a student breaking down

Consider the case below and whether it could have been handled differently or handled better by the supervisors.

Annette's PhD was progressing well for 3 years when her life suddenly went into meltdown. She was studying part-time and working full-time. She had a draft of her literature review, had collected her data and was analysing it, and had a well-reasoned methodology, but still needed to put it on paper. After 3 years of study her boss changed and she was bullied horrendously by the new appointment. Any time allowance for her studies that she had been receiving was revoked and the value that her research added to her work was no longer seen as relevant.

Annette continued to come to supervision meetings and was trying to progress her work at weekends but was tired, getting depressed and lacked the mental stimulation of discussing her research with her boss. Her research was directly relevant to her job role. Her supervisors tried to give her strategies to help her deal with her new boss, as well as to progress her thesis, but she was in such a low place, she could not see the value in what she was doing any more. The supervisors were finding it difficult to offer constructive, critical feedback as anything remotely critical was seen as exceptionally negative and a reason for giving up. A more appreciative tone was adopted in order to keep Annette on track, but the work quality was suffering.

Eventually Annette reached such a low point, that she suspended her registration for 6 months to try to sort herself out. Annette was systematically bullied for the best part of 18 months before she had a complete breakdown. She then spent the best part of 9 months off work and her PhD registration was suspended for a further 6 months.

Annette restarted her PhD prior to returning to work as she thought this might help her get into a more positive frame of mind. The work was at a point of needing serious critical review and the supervisors were worried that she would not cope with this feedback. A number of peculiar supervision meetings occurred where feedback was given in as positive a manner as possible, but Annette started to play off one supervisor against the other in a game of 'paranoia'. This was a very difficult situation for the supervisors and was in danger of ruining their professional relationship. Luckily, they kept in close touch and blind copied each other into any correspondence they received from or sent to Annette. Their feedback was being twisted and misconstrued to each other and Annette's work was not progressing at all with regards to quality of output.

In order to boost her confidence, Annette decided she would submit her thesis. The university rules allowed a student to do this without the supervisor's agreement. She sent the 'final thesis' she was going to submit to one of her supervisors prior to submission. The work was a long way from being submissible. The supervisor immediately called the other team member and they had a discussion. There were two options – give Annette the feedback that they thought this would fail, or let her submit and fail. Neither response would be received well and would fuel the paranoia that Annette was currently being treated for. In the end they decided to keep it in-house and act as responsible supervisors and tell Annette they thought it would fail. They felt the worst that could happen would be that Annette request they were removed from her team, which would have been a relief since they were struggling to cope with the distress of seeing Annette in such a sorry state and not being able to help her at all.

A long and carefully crafted email was sent to Annette to advise her that the team thought her submission would fail. The email set out the examination criteria for a PhD as specified by the University and then discussed Annette's submission with respect to each of the criteria. Not one of

the criteria was satisfactorily met in the eyes of the supervision team. Predictably, Annette was furious at the feedback and immediately complained to the University about her supervisors. As part of her complaint, she forwarded the email advising her of the supervisor's opinions. The Head of Research Degrees held that the email gave her excellent advice and feedback and she would do better to adhere to the advice than complain.

To this day, we will never know what the tipping point was. Perhaps it was something her counsellor said to her, the medication from her doctor, or the response of Head of Research Degrees – we simply do not know. However Annette changed her perspective. The paranoia disappeared. She suddenly became open to the feedback given, and indeed wanted as much as possible, so she only had to rewrite once. Although the supervisory team advised her that it is unusual for there to be only one rewrite, Annette remained single-mindedly determined. She focused on her thesis rewrite as means of keeping some focus when she started to return to work.

Much to everyone's amazement, Annette did rewrite the thesis only once and literally adhered to every comment, question and piece of advice offered. She submitted the final thesis 4 months later and it was examined requiring minor amendments only. The supervisors still look back at this as the student that they feel most proud of since she was once so broken they had no idea how to help fix her, but she came through it, stuck with them, trusted them in the end and succeeded. Equally, they persisted when the going got really tough and didn't allow the paranoia and game playing to ruin their professional relationship.

G1.11 Dealing with abnormal or unacceptable student behaviour

Following any incident of abnormal or unacceptable student behaviour, the following stages of action could be considered:

- assessment of the incident(s) generating the concern and reassessment of the behaviour in relation to accepted academic relations, university codes of conduct and health and safety concerns,
- confidential discussion with co-supervisors, colleagues, school HDR leader, Head of School, the Associate Dean Research and with medical and pastoral support services as appropriate. Supervisors and other staff may need support, advice or private and confidential counselling or may decide to lodge a grievance or seek compensation for a workplace accident or injury. Where a student exhibits behaviour that puts either themselves or staff in physical or ethical danger, it is imperative that the staff member ensures that the relevant university manager is aware of the situation,
- the agreement of possible actions, support and new ground rules for the supervision relationship (e.g. student always meets with more than one member of the supervisory team, or meetings are always held in a more public place than a supervisor's office, written or audio/audiovisual records are made of each meeting and stored appropriately, supervisors and other staff rethink their usual work practices, seek further formal or informal mentoring and/or peer-support or work more closely with other support services),
- formal discussion with the student about the issue with co-supervisors present and agreement of new ground rules and additional support mechanisms. Supervisors should explain to the student as clearly as possible that specific instances of inappropriate behaviour do have consequences for their academic relations, progress and prospects,
- formal communication clearly documenting any exploration of additional support services for the student, since supervisors are limited to providing academic? support. It is always up to the individual student to determine whether to accept any personal help offered by the university,
- consideration of further formal communication about the issues of concern, and
- where changed ground rules do not change behaviour patterns, the university may need to consider suspending the student or terminating that student's candidature.

In the light of your institution's policies and guidelines, review the cases tabled below and decide on the best course of action in each of the cases after considering:

- What needs to be done?
- Who needs to be notified, involved?
- Which lines of enquiry are appropriate and likely to be useful?
- Are there any special issues dealing with students who are rarely or never on campus?
- Any there any special issues relating to international students or scholarship students?
- Are there any helpful strategies to be adopted for future contact with this student?
- Are there any measures that a member of a supervisory team can take to avoid or be better prepared for involvement in such cases in an immediate, short-term or longer-term timeframe?

Case	Outline
1	For weeks now, the student has not made contact with any member of the supervisory team and has not responded to emails, phone calls, or text messages from the principal supervisor
2	Repeated reports that a particular student has been seen crying on campus reach one of that student's supervisors
3	Reports that a particular student is often heard complaining about a particular supervisor reach one of that student's supervisors

Case	Outline
4	Reports that a particular student is often heard asking for help with tasks usually well within the capability of undergraduate students reach that student's supervisors
5	Walking past a room used by HDR students, a supervisor witnesses what appears to be an unprovoked attack by one of these students on another student
6	A normally well-organised student sends a most incoherent email to a supervisor, who has not met that student in person for a considerable period
7	A student seems at risk of getting stuck in a state of unreasonable anxiety or depression
8	A student faints or fits during a supervision meeting
9	A student is rude and abusive during a supervision meeting
10	During a meeting with a single supervisor, the student becomes uncharacteristically upset, aggressive and punches the supervisor
11	A supervisor is traumatised as the result of an attack by a supervised student
12	A supervisor is concerned that meetings with a supervised student are acquiring sexual overtones

Having considered those 12 cases, how would you now define 'abnormal or unacceptable student behaviour'?

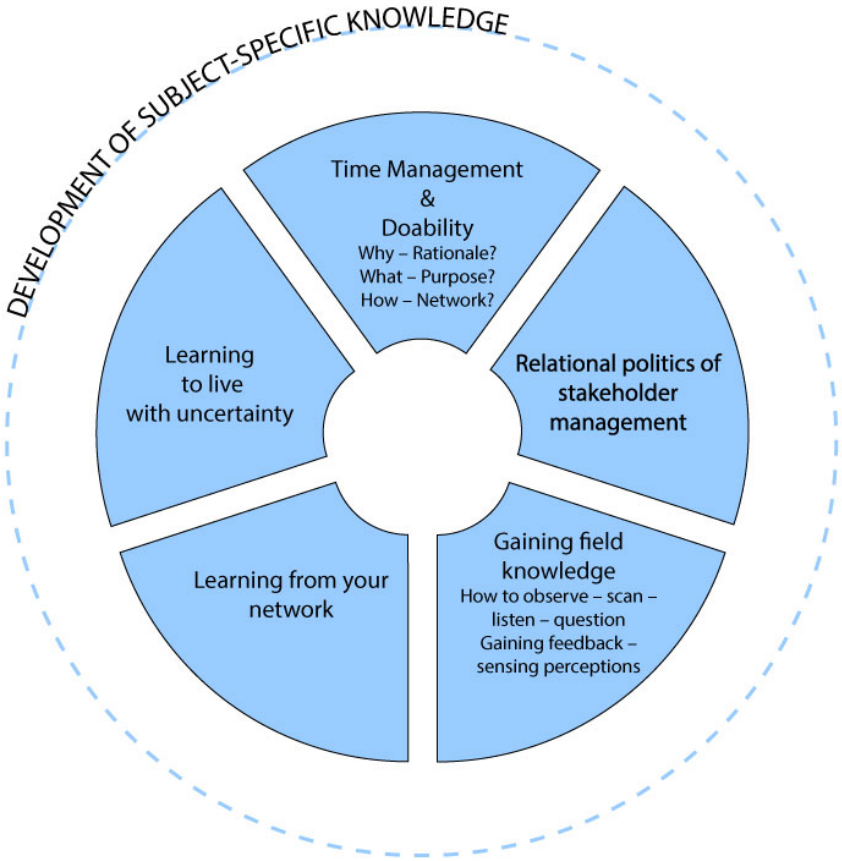
Complete the table below to summarise your current framework for dealing with the sets of symptoms that you recognise as defining 'abnormal or unacceptable student behaviour'.

Observed symptoms and signs	Strategies of inquiry Who, what, how and when	Duty of care for the student	Staff protection issues	Relevant guidelines/ frameworks

G2.1 Building personal researcher capability

Although many students intend to deliver a major thesis with significant implications, the core of the HDR process is about research training and developing skills that will form the basis for further and extended career in the area of research. The most valuable developmental focus during the candidature may therefore be to encourage reflection and learning about the relational and self-management skills that are developed simultaneously with the candidature.

Consider using the following model as a point of discussion to make candidates more self aware of their own development as well as the development of their studies. All too often the complexity of the task so inhibits students from exploring too far away from their central task, that most candidates only develop expertise in specific technical and methodological areas.



Remember:

Time Management and doability	At the core of any study, students have to manage their own time and develop rationality about what is possible, rather than what they would like to do.
Living with uncertainty	Managing a long study requires strength in learning to live with ambiguity and uncertainty. As each emerging problem is solved, new fears emerge including fears that the study may never be completed.
Stakeholder management	Candidates focused on a major learning project also have to develop the skills of managing a range of stakeholders within the University and in the field of practice, learning from those relations.
Field knowledge	There is likely to be significant learning from the associated fieldwork about how to gather data and how to manage the processes.
Networks	There is likely to be significant learning from the associated networks – provide the student asks the key questions

G2.2 Managing the mentoring relationship

Some key learning about the mentoring of HDR students has emerged from recent research

Early contact	Successful relationships begin with a formal early meeting, where the supervisor makes clear that personal development and support is a part of the relationship
Early intervention	If the researcher falls behind the draft timeline that has been agreed at any time, this is a trigger to explore what skills development and support is necessary
Responsiveness	Experience has shown that a brief early response to the student researcher is the most effective supporting and motivating action. Mentors have often focused on quick and focused responses to the researchers, rather than more detailed responses weeks later.
Knowing what the outcome looks like	Effective mentoring provides the student with a continual picture of what the future can look like, that increases in detail as the candidature progresses.
Knowing what the mentoring role is about	Supervisors need to: • review their own progress with students, • check which areas of mentoring they are focusing on, and • consider why other areas have not become part of the mentoring relationship.

Do you agree? What would you change about the table above?

G2.3 Prioritising the current mentoring roles

Research supervision involves a complex set of intertwining roles that are unique to each candidature. Supervisors may be subject experts, collegiate explorers, emotional supporters, process protectors, skill coaches, editors and advisors at different stages of candidature, and with different students. However, managing thesis production and mentoring the candidate are primary responsibilities. The supervisor not only is required to produce completed theses, but also to produce well equipped researchers as the product of this research training. Balancing this management and directive role with the need to also be a personal and emotional supporter and coach problematizes each relationship. Mentoring HDR students is often the peak of our professional responsibility as educators.

Mentoring is diversely interpreted and depends on the specific needs of each student but may involve many roles (e.g. being a teacher, guide, motivator, coach, advisor, sponsor, role model, referral agent, or a door-opener). The priority assigned to each of these roles is likely to change during the research journey.

What are the current priorities in the mentoring relationship?
Rank the following: 1 is Essential , 5 is Optional

Collaborative Project Management	• Planning the research processes around work and family – goal setting • Supporting reflection about research experiences – being a sounding board • Reviewing research progress – being a critical friend • Discuss relevant concepts and theories – knowledge development • Planning a personal research development program – giving guidance
Emotional Support	• Respond to calls for support – being a responsive helper • Responding to emotional crises – being a personal supporter (see G1 tools) • Probe for and request explanations about research processes – instigate reflection • Listen to issues and barriers – encourage reflection
Network Expansion	• Indicating key sources of advice within the research network – expanding the network • Facilitating relations – introductions to key conferences and key field-work gatekeepers– practice network • Introducing new researchers to cross institutional network colleagues and other network colleagues – acting as a referral agent • Indicating how to access key sources of research knowledge – opening doors • Suggest possible contacts for future work and research contacts • Offering advice about accessing further research training – making suggestions

Technical Coaching	Respond to questions about research focus and activity – Clarifying direction Responding to questions about research activity – building knowledge development Offering advice about research actions within area of expertise - offering knowledge Offering alternative solutions to research issues – producing options for problem solving Offer advice on data collection issues – focusing experience Offer advice on learning sources for analysis and interpretation– knowledge frameworks Offer advice on learning sources for conceptualising practical and theoretical conclusions Offer advice on learning sources for structuring text and reviewing

Given those priorities, how would you categorise and prioritise
"Editing and reviewing work – to provide feedback"?

G2.4 The editing relationship

Supervisors often develop a range of editing strategies through working with colleagues on joint papers, through acting as a reviewer or examiner, in their regular feedback on student course assignments, and through their experiences with their own supervisors. These models may not, however, be appropriate for the supervision role or may not be appropriate for specific students.

Editing HDR work has three primary purposes:

1. It provides direct feedback to the student about the effectiveness of their text and the readability of their work, and what is required to meet thesis standards,
2. It indicates areas where the student needs to explore further to improve the quality of their text, gain further understanding, or introduce additional academic work, and
3. In the midst the critique, it is important to provide positive feedback to keep the student motivated and to affirm where standards are being reached or exceeded.

Most supervisors confront the issue of editing by asking:

- how much should I edit,
- in how much detail should I edit, and
- what contribution to the text should I make?

Consider how and why you agree or disagree with the five points listed below.

Point 1. There is a natural tendency to want to tear ill-constructed sentences into components and reassemble them. However, while this may be instructive in small doses, it also does the work for the student and displaces their role as the primary author. Editing is not just about producing a passable text is about developing the student capability to produce such a text.

Point 2. Providing 'track changes' that enable the student to press the 'accept' button does little for skill building. Indeed, once this is started the supervisor takes on the responsibility for further detailed correcting work. Work that they do not have the time to do and should not ethically do.

Point 3. Writing capability is high on the list of skills HDR generate. Supervisors also have to make judgments about how much time they can allocate to develop such student skills and when the services of the Faculty writing consultant may be required. Early assessment means a lengthy development period can be secured at the start of the candidature.

Point 4. At the close of the candidature, the supervisor should also guide the candidate in the decision-making process about the final proofing of the thesis, and what sequence of checking is required.

Point 5. As in all decisions, each candidature is often unique, but a thesis with a proliferation of typos can irritate an examiner with disastrous consequences and obscure other fine qualities about the study and the thesis.

H. Supervisor development

Introduction

The focus of supervision is understandably upon the student and the thesis. However, it is widely understood that it is the supervisor that is the most critical component in terms of achieving successful completion. How does a supervisor reflect on their own experiences and build their supervisors capacity?

There are very diverse modes of supervision, often dictated by disciplinary imperatives but often a reflection of the supervisors' character. Although there is no single recipe for successful supervision, there do appear to be three important underpinning capabilities. Effective supervisors:

- ensure that the candidature progresses according to the policies and practices of the institution,
- reflect and learn from each interaction building up a reservoir of experience and wide range of decision-making tools and options, and
- learn from their colleagues, contributing to and building the community of practice for supervision around them.

Continued compliance

The policies, practices and support services of each institution are continually changing. Significant opportunities for students, new systems for gathering knowledge, improved practices can pass supervisors by in the overload of information during a working semester. Time has to be allocated to refresh basic knowledge of what is being provided and how the systems have changed on a regular basis through attending institutional seminars where such updates occur.

Continued learning

Every student interaction is simultaneously work and learning. However, reflection is needed to turn such experiences into personal knowledge stores. Time has to be allocated for such reflection close to the event. Follow action to confirm the action a student should take by thinking about what has been learned from the encounter. Verbalising such learning with a supervisory panel can formalise and improve this reflective learning practice.

Collaborative learning

Individual learning is just the start. Only the very basics of a complex practice can be codified. The practice of supervision is very complex and requires a continual balance between emotional support and task progress with students who exhibit very diverse needs and goals. The practice also exists in rapidly changing social, economic and policy environment. Supervision practice is therefore very fluid and changing in nature, but benefits greatly from collegiate discussions that confirm that individual perceptions, concepts, beliefs and practices are in line with the current culture. Such discussions not only act to confirm and give supervisors confidence, but also enable current systems to be challenged and extended by new ideas and options. Building a supportive 'community of practice' is an important building block in developing improved supervision capability and thereby improving the rate of successful timely completions.

Tools

As shown below, this component has two subcomponents, each with specific tools.

Subcomponent	Relevant tools
H1. Community of Practice regarding HDR supervision	H1.1 Top tips for supervisors H1.2 Eleven Practices of effective supervision H1.3 Community of Practice for supervision H1.4 Setting up Action Learning sets H1.5 Peer coaching H1.6 Mentoring colleagues H1.7 Building your own supervision guidelines H1.8 Getting help with use of Skype, Adobe Connect Pro, Blackboard, videoconferencing and PebblePad in supervision H1.9 Reviewing support for use of tools such as Skype, Adobe Connect Pro, Blackboard, videoconferencing and PebblePad in supervision
H2. Ready to run workshops	H2.1 Offcampus supervision H2.2 Five frequent dilemmas of supervision
H3. Serving as a thesis examiner	H3.1 Why and how to become a thesis examiner H3.2 A suggested template for an examination report

H1.1 Top tips for supervisors

Please note that these tips gathered from HDR supervisors at five Australian universities do not cover all of the components in the supervision framework

Component	Top tips
Overall	• Remember that the supervision process is all about doing research, & learning about research, so don't let the forms get you down • Processes entail risk taking, thought, judgment and open-ness to unpredictability
A. Selecting for Success	• Take care in selecting a student to supervisen (e.g. consider language, tenacity, focus, critical thinking, compatibility) • Before taking on a student, evaluate as well as you can if the student has the potential to be an independent researcher • Be a good listener - listen to the student (including the student's unspoken words) to figure out who they are, what ideas they have, how committed or independent they are) • Be flexible - the PhD is about the student, not the research or you • Ensure the students choose topics of interest to themselves • Be sure you want to work on the topic (especially when inheriting students from other supervisors) and be prepared to negotiate with the student about this • Be knowledgeable about the student's topic • Make sure you have a sufficient grasp of the methodology • Never underestimate the difficulty of getting all the required ethical clearances for research projects involving vulnerable groups
B. Setting expectations & getting agreement	• Set clear and realistic boundaries for the supervisor–student relationship (e.g. number of drafts to be read) • Set out the ground rules regarding authorship at the beginning of the HDR process • Get the student writing early & often • Develop writing supports and standards • Help the student to get any other needed help with writing as soon as possible • Cultivate the student's skill with language • Provide/facilitate opportunities for the student to develop other career relevant academic and professional skills
C. Achieving confirmation	• Make sure the thesis is doable and of the right size • Make sure the research design is suitable • Think about examiners from the beginning
F. Managing progress	• Be organised/structured • Set out the process • Be firm but encouraging - set goal posts / milestones • Research question must guide the research journey • Maintain momentum (avoiding the post-proposal slump) • Focus on ensuring the student is ready for each milestone • Avoid letting things drift • Focus on the big picture

Component	Top tips
G. Managing relationships with the student	• Be professional, honest & consistent • Treat the student as a colleague with whom you can co-publish • Become a nurturing, mentoring presence in the student's life • Meet or have contact with student regularly • Reduce the student's reliance on the supervisor over time • Encourage the student to team up with people who have collegial relationships
H. Supervisor development	• Spend two months getting ready to supervise • Do the supervisor training • Know the university policies, processes and procedures regarding supervision very well • Supervision will be as hard as teaching a class • Be wary of the likely pitfalls of supervision
J. Completion and career	• Encourage the student to publish (gives the student an advantage when competing for jobs)

What would be your top tips for these components or for the other components of the supervision framework?

H1.2 Eleven practices of effective supervision

The Eleven Practices of Effective Postgraduate Supervisors identified by the University of Melbourne (and listed in GRIP) can be summarised as

1. Ensure the partnership is right for the project
2. Get to know students and carefully assess their needs
3. Establish reasonable, agreed expectations
4. Work with students to establish a strong conceptual structure and research plan
5. Encourage students to write early and often
6. Initiate regular contact and provide high quality feedback
7. Get students involved in the life of the school
8. Inspire and motivate
9. Help if academic and personal crises crop up
10. Take an active interest in students' future careers
11. Carefully monitor the final production and presentation of the research

Consider each of these 11 practices and decide whether you think it is most important:

- at a specific stage of the HDR journey, or
- throughout the degree.

H1.3 Community of practice for supervision

University, faculty and school managers can assess and develop a 'community of practice' or CoP network for HDR supervision by building:

- reflective formal and informal supervision conversations between colleague supervisors within schools and across the university, and
- understanding that 'knowing' about supervision requires collaborative reflection on experiences, where understanding is explored and tested with colleagues to produce a culture, where process and procedures become shared and common.

Use and promote these links to online materials to build understanding of what a CoP is and how it can build research supervision capability.

- http://www.stanford.edu/~eckert/PDF/eckert2006.pdf
- http://www.ewenger.com/theory/
- http://pagi.wikidot.com/wenger-social-theory-learning
- http://www.ewenger.com/
- www.youtube.com/watch?v=ttFUcgWqA6Q

Use a model of cascading learning through the university to provide materials and themes for each school research supervision coordinator and facilitating their local learning conversations:

- establish a research supervision coordinator within each school,
- brief coordinators on the CoP purpose and action,
- supply facilitation materials to each coordinator for school conversations, and
- monitor development by coordinator meetings for review and material generation.

Use this (or a customised) checklist to assess the development of the CoP:

- Is this domain of learning a regular formal conversation?
- Is this domain of learning a regular informal conversation?
- Are colleagues expressing learning from conversations?
- Is the community inclusive and educative to new colleagues?
- Is the community inclusive in inviting cross-university colleagues to share experiences?

H1.4 Setting up Action Learning sets

For many people, the process of Action Learning formalises a way in which they normally problem-solve and learn, and in doing so involves them with people they might not otherwise have worked with. Members of an action learning set may or may not know each other prior to forming the set, and the ideal number in a set is 4-5 people.

In essence, Action Learning involves people discussing their problems with a group of others, and working out a way of taking action to resolve the problem, feeding back to the group on a regular basis and refining the action as necessary. Although many people may feel they do this already with their friends or colleagues, being involved in a formal action learning programme means that people are often grouped into an action learning set with others they would not normally have worked with. This has the added benefit of allowing them to see how their problem or issue would look from the other set members' eyes.

Each person shares a problem with the set, and each person commits to some action as a result of the set meeting. It is a form of experiential learning, which is shared with a group, and involves the set asking questions to help its members' reflective processes.

Setting up Action Learning sets

Find 3-4 other people willing to engage in the action learning experience as a means of supervisory skills development. They need to be willing and keen to get involved, as reluctant participant will not engage sufficiently with the Action Learning process. One person needs to act as the 'set facilitator' to ensure that meetings are arranged and that time-keeping is adhered to in each meeting. Arrange to meet somewhere relatively private, but also somewhere comfortable with tea/coffee making facilities and available for approximately 3 hours every 4-6 weeks.

At the first meeting, you all need to introduce yourselves briefly and establish the modus operandi. Points to consider include:

- frequency of meetings,
- commitment to action between meetings,
- Chatham House rules (i.e. keeping what is said in the learning set meetings confidential), and
- time-keeping within learning set meetings (e.g. a maximum of 30 minutes per person).

The first person then shares with the group a situation they are struggling with. Be very specific about it. The rest of the group ask questions about this situation to help the member redefine it and think about the situation from a different perspective. The member reporting the situation should reach a point where an alternative way of tackling the situation becomes so apparent that the member wants to go away and try it. At this point, the member commits to taking a specific action and another the shares a situation with the group.

At the next meeting, each person starts their timeslot by feeding back on how their action went and what they learned from it, before either continuing with the next cycle of that situation or moving to another situation.

Setting up virtual Action Learning Sets

For an Action Learning set to run virtually, the whole set would need to be on-line or on Skype or a conference call simultaneously, so that they could ask each other questions in response to blog postings. Each of the members would need to write a brief of their problem/issue, which could be pasted onto a wiki. Other members of the group would then type in their questions and the learner could respond. Once that learner had reached a point of committing to a way forwards, the group would move on to the next learner.

H1.5 Peer coaching

Given that supervision usually occurs in a team, helping a less experienced supervisor work in a team context is also important. As a supervisor, you are undoubtedly aware that students vary widely in their academic backgrounds from relative novices to very experienced professionals in their own right. Often the latter have worked as academics or professionals for years and are seeking a higher degree by research to enhance their credentials. These candidates bring much to the supervision process and indeed to the climate of the wider group of candidates. Individual supervision strategies need to reflect the realities of all these different student characteristics and needs.

Defnintions

Mentoring	The sharing of knowledge between a mentor and mentee with the aim of developing professional practice and capacity
Mentor	A person with particular professional experience who counsels, guides or advisors a less experienced professional
Mentee	The person or professional who is being mentored
Coaching	The process of recognising, supporting and developing the capacities and confidence of the person being coached

This tool uses the terms mentoring and coaching interchangeably and views these two processes as overlapping and complementary.

Recommended steps to follow

- Match a coach/mentor with their mentee (ensure it is a voluntary arrangement).
- Encourage them to set out and agree upon their mutual expectations in an initial meeting.
- They should focus on one or two challenges or issues in the supervisory relationship and discuss potential solutions/approaches.
- Mentee records and shares notes. Mentee reflects in writing on the success of these approaches after putting the ideas into action.
- Mentee and coach meet again to discuss and evaluate the success or otherwise of the agreed approaches. What lessons have been learnt from this exercise? How has the supervisory relationship been improved? Can this be done better?
- Repeat the sequence with modified approaches or new issues as required.

Some important principles to remember

1. Coaching should only be done by experienced and senior supervisors with a good record of supervision practice,
2. Coaches or mentors must have volunteered and be committed to the development of others.
3. The mentee must have volunteered to be coached/mentored.
4. Wherever possible, the mentee should select their mentor/coach.
5. The mentor or coach must make adequate time available for this process.
6. The mentor or coach must respect their mentee and be prepared to learn from them too.
7. The mentor or coach should be prepared to offer a considerable amount of feedback (both positive and negative).
8. Both parties should be committed to confidentiality in the relationship.
9. The aim of the exercise is to develop a confident, independent supervisor.

Measurement and evaluation of outcomes/objectives and outputs

Evaluation occurs at the second meeting after joint reflection on how the strategies or approaches worked in practice. This can be repeated with each successive meeting until a body of knowledge is

shared and reflected on. Having the mentee keep a reflective journal keeps information accurate and organised. Measures of success include:

- confidence by the mentee in dealing with supervisory issues/challenges,
- openness in the mentee to improvement and recognition of the value of diverse approaches,
- development of a range of different strategies for dealing with supervision,
- development of strategies to working with other supervisors,
- increased awareness of their role and behaviour in the supervisory relationship, and
- greater reflexivity around the particular needs of different students and strategies for responding to these needs.

H1.6 Mentoring colleagues

Research supervision primarily is about developing relationships with HDR students, but it is also about developing relations with colleagues who are supervisors, especially where they are new supervisors. Why should we bother, because as professional educators we have taken a responsibility for developing the quality of student support and building our organisational capacity. Also, we all wish to be part of a growing area of excellence. While there are only so many students that we can manage, we can prepare colleagues to manage more.

At first, we all learn a great deal from our own experiences of being supervised and these, for better or worse, form the core of our practice. While we subsequently learn from seminar training, literature, policies and our own experiences, one of the most fruitful learning sources is our everyday conversations with colleagues. This is especially true, where we are part of a panel and can learn from experienced supervisors by listening to them and by seeking confirmation of our own perspectives.

Before too long, we find that we are cast in the role of an experienced supervisor and that we are supervising not just students, but also new supervisors. How should we develop that mentoring role to develop other staff in their research supervision journey?

Of course every relationship is different. In some case new supervisors may want to listen and learn and in other cases they may feel ready to lead. Where possible, offer a 'cognitive apprenticeship' through all the interactions, explaining why you are saying or writing specific things to the student. Make your thinking clear to your colleagues, so they can understand your underpinning rationale. Where possible consider having open conversation in front of the candidate, until dilemmas preclude such a course. Sometimes, when the new supervisor takes the lead, the experienced mentor can play devils advocate.

The following actions should be discussed, so that a pattern for the relationship and reflection can be established:
Structured and negotiated:

- What are the expectation of the protégé and the mentor in terms of:
- Meeting sequences with the student in terms of dual or singular attendance?
- Mail interaction in terms of copying posts?
- Providing direction without dual consultation?
- Always copying each other in all posts?
- Dual reflection about student progress and needs after consultations (or during)?
- Dual reflection time about the mentoring relationship to confirm learning and explore issues?
- Completion of the end of seminar progress reports?

What roles will you both play?

- Silent partner – active partner
- Lead and deputy
- Joint lead at different times
- Good cop – bad cop
- Manager – mentor
- Administrator – philosopher

Discussions of the mentoring relationship may also consider the following issues:

- guidance on formal development opportunities,
- listening to the novice reflections on student issues and progress to confirm perceptions,
- lobbying for additional research responsibilities,

- providing learning from previous experiences,
- offering knowledge about the next stages of candidature,
- suggesting sources of advice,
- providing introductions to key network colleagues,
- reviewing feedback given to students, and
- discussing other approaches to study development.

H1.7 Building your own supervision guidelines

Each supervisor is initially guided by their own experiences of how they were supervised. They either follow the methods that their supervisor used, or avoid the mistakes they believe their supervisor made! Gradually they learn form their own practice and from conversation with other supervisors.

Supervision is a complex practice and involves many phases and unique individual relationships. However, as with research some enduring patterns begin to emerge – what to do and what not to do. They are often very specific to each individual's experiences.

Most lecturers at some point make a statement about their teaching philosophy and most researchers make a statement about their personal research project. What may be beneficial from time to time is to review the learning that has been taking place about supervision and make a similar statement. If you do this with a colleague, you can engage in joint reflective review.

The following table presents a format for what can be a short reflection and discussion, producing an outcome that can be used to ensure the big picture is being followed when everyday activity is often caught up in focused detail

What I have learned about Supervision

Step 1. On your own, or with a colleague, write down the most important guiding rules about supervision that you would tell a new supervisor to keep them on track.

	Guideline
1.	
...	
10.	

Step 2. Consider the following example produced from a focus group of experienced supervisors and examiners and reflect on the meaning and rationale of your own listing.

	Guideline
1.	Get prospective candidates to take early writing action
2.	Discuss self management, a schedule and data management at the start
3.	Locate and build from what they know and what networks they have
4.	Focus them on either width or depth and indicate what is not achievable
5.	Support and motivate every time they leave you
6.	Confront schedule failure and skill issues at once
7.	Get them to attend conferences and write articles where there is capacity
8.	Continually discuss what the contribution to knowledge will be
9.	Get them to focus on potential examiners who have shaped the study
10.	Support them still when the thesis is under examination and write articles

Step3. If possible, compare your list with a colleague or and discuss the meaning and rationale of your listing.

Step 4. Amend you own list in hindsight and use it as an aide memoire at the front of your supervision file.

H1.8 Getting help with use of Skype, Adobe Connect Pro, Blackboard, videoconferencing and PebblePad in supervision

Lack of familiarity with communication tools such as Skype, Adobe Connect Pro, Blackboard, video conferencing and PebblePad can:

- constrain supervisors' abilities to participate live in supervisor workshops held at campuses other than their own,
- constrain supervisors' abilities to access recordings of supervisor workshops held at campuses other than their own, and
- lead supervisors to rely on a narrow and sometimes less than optimally productive mix of tools for communicating with each other, with off-campus students and with the wider community of practice relating to HDR supervision.

The range of training and support services provided via the Graduate Research School's SOAR centres at Joondalup and Mt Lawley, has therefore now been expanded to assist both HDR supervisors and research students to become more confident, competent, frequent and appropriate use of communication tools such as Skype, Adobe Connect Pro, Blackboard, videoconferencing and PebblePad.

HDR supervisors are encouraged to contact a SOAR centre to:

- discuss how they should get ready to use Skype, Adobe Connect Pro, Blackboard and PebblePad and choose when and how to use any of those tools,
- request a SOAR Centre Ambassador to visit the supervisor's office, check whether their computer is actually equipped with a microphone and as necessary assist in arranging to obtain required access to microphones, headphones and other relevant equipment and software,
- arrange to work with a SOAR Centre Ambassador to practice the use of Skype, Adobe Connect Pro and Blackboard, PebblePad and other ITC tools,
- discuss and address difficulties experienced in the use of these technologies, and
- refer any of their students to attend a GRS training workshop, SOAR Session (small group workshop) or receive assistance from a SOAR Centre Ambassador regarding the use of Skype, Adobe Connect Pro and Blackboard, video conferencing and other ITC tools.

SOAR Centre ambassadors can also assist supervisors needing online access to an up-to-date set of tailored handouts on the use of these communication tools, that can be used as the basis for:

- individual or group study, review and reflection by HDR supervisors,
- face-to-face workshops for HDR supervisors,
- webinars for HDR supervisors.

HDR supervisors can book their appointments with SOAR Ambassadors for support by:
phone,
visiting the offices of the SOAR Centre,
using an online booking form similar to the sample form at http://intranet.ecu.edu.au/research/for-research-students/soar-centre/support-available/book-an-appointment

H1.9 Reviewing support for tools such as Skype, Adobe Connect Pro, Blackboard, videoconferencing and PebblePad in supervision

Periodic institutional reviews can identify the full range of support services available within ECU, the faculty and school to assist HDR supervisors, who are not yet confident and competent users of tools such as Skype, Adobe Connect Pro, Blackboard, videoconferencing and PebblePad. It may be that case that:

- some existing support services do not adequately address the need for the communication support services in the context of HDR supervision,
- there is potential to increase and improve use of communication tools such as Skype, Adobe Connect Pro, Blackboard, video conferencing, PebblePad and related support services by more clearly linking them to mandatory and optional training for HDR supervisors at school, faculty and institutional level, and
- supervisor training at school, faculty and institutional level needs to include ongoing support for the use of these communication tools.

The following 7-step process can be used at school, faculty and institutional level to review support for tools such as Skype, Adobe Connect Pro, Blackboard, videoconferencing and PebblePad.

Step 1.Decide on the scope of the review (e.g. whole of ECU, faculty, school or campus).

Step 2. Identify all support services available w to assist HDR supervisors, who are not yet confident and competent users of tools such as Skype, Adobe Connect Pro, Blackboard, videoconferencing and PebblePad.

Step 3. Contact the providers of each of these support services and ask:

- whether and how their services could be changed to make them more appealing and useful to HDR supervisors, and
- whether they know of any other relevant support services available to HDR supervisors that should be added to your list of service providers.

Step 4. Discuss your findings with the relevant service providers, HDR supervisors and other key stakeholders and decide whether any new approaches or services are required.

Step 5. As necessary, gain agreement from the relevant stakeholders to:

- put in place a prioritised action plan to provide a more useful and appealing mix of support services,
- provide the resources to pilot the action plan before proceeding to full implementation based on an updated action plan using cost & resource estimates validated by the pilot phase, and
- schedule, conduct and evaluate a pilot program for the prioritised action plan.

Step 6. Implement a prioritised action plan taking account of the evaluated pilot phase.

Step 7. Schedule and conduct a follow-up review in 12 months time to:

- assess progress towards providing a mix of support services that is appealing and useful to supervisors of HDR students, and
- facilitate the ongoing updating, implementation and evaluation of the prioritised action plan.

H2.1 Offcampus supervision (a ready-to-run workshop)

The difficulties and dilemmas faced by off-campus students and the required remedial action are often less obvious than those of off-campus students.
How should we supervise the growing numbers of research students spending all or most of their time off-campus? What are the issues that may impede effective supervision of these students?

This workshop:

- is designed to explore the current experiences and dilemmas related to off campus research and remote supervision faced by both supervisors and students,
- is based on recent research to gain deeper understanding of supervision at Australian universities and explore current dilemmas in supervision,
- draws on the well-established practices for face-to-face supervision, and
- seeks to build capability and facilitate the development of a broader series of guidelines and practices to improve the supervision and completion of the growing numbers of research students spending all or most of their time off-campus.

While clearly establishing the minimum expectation of on-campus time, supervisors need to develop new techniques and criteria for selection, improved cultural bridging for socialisation, improved understanding of diverse cultural workplace issues, and develop greater competence in using new technologies to make our supervision less remote to off-campus students.

As with any supervision scenario, there are no right or wrong strategies that apply in all situations. Much depends on a student's characteristics, their stage of candidature, the nature of any issues or challenges related to the research project, and the skill set of the supervisor and the overall supervisory team. Other relevant characteristics to consider include language, ethnicity, age, gender and degree of academic preparation for a higher degree by research. The continued interest from international students in Australian research degrees and the decline in local students due to a booming economy suggests that increasing numbers of HDR students will be international students, accustomed to speaking and writing in languages other than English and bringing with them experiences, relational networks and workplace dilemmas from other cultures and countries. It is likely that our next decade of research supervision will be strongly focused on such a group of HDR students. As always, our guidelines will vary considerably with the diversity of our students.

This 4-part workshop highlights some of the common problematic scenarios regarding off-campus supervision and provides the outline for a workshop to assist supervisors to better appreciate and address the difficulties confronting students studying entirely or mostly off-campus. It also provides a list of readings that can be extended or customised as appropriate.

Workshop outline

Part 1. Discuss the aims for the workshop

This workshop seeks to:

- explore the current dilemmas of off-campus supervision experienced by staff and students,
- explore how the expectations of students and staff can be rationalised and constructed within a contact format,
- review and build awareness of effective communication choices available to students and staff, and
- explore how an extended relational network can be constructed to support each off-campus student.

By exploring and capturing current experience, it will be possible to:

- generate guidelines about options for interaction,

- establish minimum standards and expectations for face-to-face interaction,
- explore the criteria that can be used to assess HDR capability, risk and needs of off-campus students,
- produce a supportive toolkit that assesses the technologies and options for off-campus supervision practice, and
- produce a checklist to support students and supervisors in bridging cultural dissonance.

Part 2. Exploring our experiences of supervision
(Ask participants to bring a current issue or dilemma to the workshop/webinar)

Element	Action
A diverse landscape	• Students and supervisors voice their experiences of off-campus supervisions • An introduction to the workshop/webinar outlining the goals, the process and the participants
Mediating and negotiating expectations of both students and supervisors – establishing process, goals and rapport	• Establishing roles, responsibilities • Clarifying expectations • Systematising relations
Communication options – assessing and locking into patterns Knowing what is available, uses and bundling options	• Reviewing the options • Personal preferences • Establishing an integrated pattern
Building relational support – establishing a relational network Planning a supportive environment to sustain research application	• Reviewing the student/supervisor network • Options for off-campus replication

Part 3. Scenarios/dilemmas – seeking options and context wisdom
Discuss: What support can we suggest in the following scenarios depicting student and supervisor dilemmas?

Case	Description
Silent supervisor(s)	No member of the supervisory team attempts to make contact with the student.
Silent student	The student does not respond to emails, phone calls, letters or other attempts at contact by members of the supervisory team.
Virtual worlds	The student wants all contact with the supervisory team to take place in Second Life
Isolated student	The student frequently reports feelings of isolation.
Locating resources	The student demonstrates no ability to locate resources and/or complains about difficulty in locating relevant resources
Language	English is not serving as an effective common language between student and the supervisory team. The student is having great difficulty with written and /or spoken academic English.
Into the unknown?	Student's research has departed from the direction agreed with supervisory team
Preferred learning media	The student and members of the supervisory team have quite different preferences regarding learning media.

Brainstorm options and discuss chosen solutions
Consider whether any additional scenarios relating to off-campus supervision need to be discussed?

Part 4. Review

- Clarify key points
- Discuss personal learning actions
- Seek feedback on next steps

H2.2 Five frequent dilemmas of supervision (a ready-to-run workshop)

While our own experiences of supervision are instrumental in forming the foundations of our practice, the essentially relationally restricted, individualistic, confidential and focused nature of research supervision often constrains and compartmentalizes our own development as supervisors. Although supervisors are usually briefed on the process foundations of supervision in a mandatory compliance-based course, further supervisor development is often sporadic and relies on formal and informal supervisory conversations. This ready-to-run workshop aims to:

- bring the tacit knowledge of experienced supervisors into the public domain,
- broaden each supervisor's landscape of supervision, and
- place a wider range of strategies and tactics within each supervisor's toolkit.

This workshop is framed around the key issues emerging from the current collaborative research by several Australian universities. It was developed to support experienced and new individual supervisors and their supervisory teams and build each supervisor's skills and capability by exploring common experiences and issues that are often negotiated in isolation from collegiate support.

Ideally, participants would bring along their own dilemmas for discussion and skilled facilitators would guide the activities. After an introductory briefing, the workshop can split into smaller groups, which work independently through the material and reconvene for a 10-minute plenary session marking the close of the workshop.

This workshop outline can be used as the basis for:

- individual or group study, review and reflection by HDR supervisors,
- a 3-hour face-to-face masterclass, workshop or videoconference for HDR supervisors at school, faculty, campus or whole of institution level, and
- a webinar for HDR supervisors at school, faculty, campus or whole of institution level.

Part 1. Introduction - A Diverse Landscape

- An introduction to the seminar outlining the goals, the process and the participants.
- Supervisors voice their experiences of supervision with 2 key learning points.

Part 2. Discuss the workshop aims

Following the session, each supervisor should be able to indicate:

- an addition to their HDR socialisation and orientation,
- an addition to their options for directing and motivating HDR students,
- options available for approaching a current HDR student dilemma, and
- three actions that form an agenda to develop their supervision capability.

By exploring and capturing current experience it will be possible to:

- generate improved guidelines about options for interaction,
- establish minimum standards and expectations for supervision interaction,
- explore the criteria that can be used to assess HDR capability, risk and need,
- extend the supportive toolkit for supervisors, and
- produce improved checklists to support students and supervisors.

Part 3. Exploring our experiences

What is our experience of supervision and what are our dilemmas?

Element	What to do
Let's get our responsibilities straight!	Managing expectations – establishing a pattern for progress • Establish process, goals and rapport • Establish roles, responsibilities • Clarify expectations • Systematise relations and using technologies Set the boundaries relations and expectations for the student and the team into a negotiated contract.
First we have to learn to ...!	Confront skills deficits – build capability of students and supervisors • Review the stages of skill needs • Develop analytical options • Use the network
No sign of work for months!	Confront limited progress – confirming candidature and managing marginal progress • Signs of trouble • Options for action
Yet another excuse!	Cope with changed circumstances – renegotiate plans and supervisory teams • Different sources of problems • Options for action
Will they never finish!	Focus on completion - strategies for the end game. • Analyse the problem • Produce options for action

Part 4. Review

- Clarifying key points
- Personal learning action – affirmation – three things to try and put into practice
- Feedback on next steps

H3.1 Why and how to become a thesis examiner

The greatest responsibility of any academic is making the decision that a thesis is ready for examination. The standard to be achieved is initially set by the process each academic experienced as they prepared their own PhD. However, as examination reports demonstrate, each academic interprets both the thesis and the examination guidelines diversely.

How do supervisors prepare both the thesis and the students for what is often a very subjective judgment process and ensure success? The answer consists of two actions:

1. ensure that each thesis is well prepared and more than meets the criteria for assessment.
2. become fully involved in making the same judgments about theses from other Universities in order to understand what evidence indicates that the assessment criteria have been met

To develop the valuable experience that is gained by being an examiner, you need to building your own academic network and profile through the range of actions tabled below.

Action	Considerations
1. Building your reviewing skills	Academic careers inevitably develop towards roles where considerable time is spent is spend judging the worth of individuals and texts. While each reviewing experience takes time, it simultaneously builds your own experience of what makes a good text, what contributes to a poor or flawed text and develops your experience of suggesting how issues may be overcome. While we take responsibility for our own research students and have to be involved in long continuous change processes, reviewing and examination offers a very condensed experience that builds skills. There is a hierarchy of activity that most supervisors approach with a mixture of trepidation and awe that build their experience and prepare them for the next level of assessment. Reviewing colleagues papers Reviewing conference papers Reviewing refereed articles Reviewing Honours proposals Reviewing Masters proposals Reviewing PhD proposals Examining Honours theses Examining Masters theses Examining PhD theses ARC application reviewing Journal editing

Action	Considerations
2.Publicising your availability	Most opportunities arise by invitation or through responses to expressions of interest. Sometimes a direct approach can be made to editors and conference conveners. However, research studies are often very hidden until they are available for examination. Supervisors can develop an active network of potential examination referrals in the following ways. • Membership of a Research Association. • Indicating availability at academic conferences. • Discussing emerging studies with novice PhD researchers. • Being involved in sessions for new researchers at conferences. • Extending relationships by indicating to academics your own availability. • Indicating availability on University Websites. • Responding to initial examinations with a quality review. • Continuing relations with students as they develop networks. • Continuing relationships with academics thanking them for examinations completed. • Indicating the chain of examination by including examiners in the final thesis text.
3. Producing high quality and directive reviews	There are many academics, who accept HDR examination duties and then fail to return them at the correct time or provide a complete review. It is important for new academics to demonstrate their reliability and quality as an examiner and reviewer. A quality examination consists of returning the thesis review on time and providing a direct response to the criteria provided by the specific university for the examination. The first issue can be easily achieved by inserting adequate time for the examination in your diary well before the due date. If any emergencies do occur, it is advisable to inform the University administrator who sent the thesis so they know when to expect the complete report. While the first examination may take considerable time most examiner require a complete day to read and record their comments on PhD theses of about 80,000 words. The second issue requires the examiner to pay specific attention to the criteria for examination, that vary widely between Universities and between qualifications. The definition of what is required for Professional Doctorates is very diversely interpreted. Universities often require both a numeric and text assessment. It is important to provide both as they will be used by the group of academics at the home university to grade the thesis using the two or three examination reports that are returned. While examiners are asked to address specific criteria in their assessment there is additional information that may be required to provide. Many academics either keep a note of minor text typos to help the candidate that is often separated from the main critique. Sometimes a marked hard copy may be returned. Also, there is a great benefit from detaching the imperative critique from the advisory critique; what must be addressed from what might be re -considered. Experienced examiners respond with around a three to four page review, although some review may reach 20 pages. There are two audiences, the University and the student. A direct response to the criteria and grading address the Universities requirements. A direct and clear set of recommendations addresses the students' needs.

H3.2 A suggested template for an examination report

To set up a template for reviewing that can be modified the specific criteria for a particular University, you need to:

- Establish the return date and allocate diary time to ensure the job is complete a week before that date.
- Contact the University if there is an issue and indicate when it will be returned.
- Read the criteria for assessment thoroughly.
- Modify your examination template to accommodate the criteria.
- Read, mark and note the thesis in one session.
- Discuss dilemmas with colleagues.
- Use the ECU checklists as a guide to your process.
- Separate the imperative changes from the advisory changes.
- Have a clear rationale for your thesis grading and make it explicit.
- Provide typos help where possible for the student.

Modify the template below as appropriate.

Edith Cowan University

Examination
by
Dr [Name] - PhD ECU
Title - School
Faculty

Thesis Title

Candidate - University
Date - Year

Introduction

Overview

- Overall assumptions about the thesis level and quality of the study.
- Examination approach
- Use of the supplied criteria for the examination
- Approach to the examination.
- Notes made about the text

Format of this report

This report is constructed in two main sections:

1. a formal response stating the grounds for recommending the classification of the thesis that includes strengths and weaknesses of the thesis and indicates the amendments that are necessary.
2. a more detailed reader's comment on each chapter in the dissertation that includes reinforcement of key issues addressed by the author and advice for the author about related concepts.

Grounds for thesis classification

Classification of the thesis	I recommend that this dissertation be graded as follows:
Grading as indicated by the University	Broad rationale for the grading according to the criteria.
Grounds for classification	Formal and detailed response to each criteria indicated by the University for assessment purposes.
Amendments to be considered	Specific numbered issues the candidate should address. These amendments are listed in priority order. In addition, there are some minor issues that 'may' be addressed as detailed in the chapter by chapter review that follows.
Chapter Review	Title Abstract Contents Chapter 1 Chapter 2 Chapter 3 Chapter 4 Chapter 5 (Use dot points accumulated while reading)
Ending	End with encouragement to candidate and offer to discuss issues later.

I. Early exit strategies

Introduction

Not all research journeys end in success. Unlike coursework credentials that have clear learning prerequisites, it is difficult for the student to grasp the extent of the self management task required for the HDR journey and for the supervisor to predict how a student's motivation, skills, and capability will grow during that journey. In any candidature spanning several years, a whole range of external life forces, often completely out of the control of the supervisor and student, will impact on the research study. Decisions made in good faith may not be able to be fulfilled.

While the process of acceptance and the confirmation of candidature act as milestones that can be used to assess candidature, the often extensive period of data collection, analysis and write up may be further extended for very good reasons. This extension can take the impetus out of the study, cause the student's motivation to deteriorate, and make the student lose confidence about completing the research journey. Whenever the project timelines become detached from original plan, the supervisor must take appropriate action.

The strong bonds that supervisors often forge with their initial HDR students that these bonds can inhibit more rational management. Many novice supervisors are also fear that 'failing' with a student may curb their prospects of supervising further HDR students. Where discussion about confronting lack of student progress and even considering alternative exits strategies are part of the supervision culture, these options are, however, viewed not as weaknesses of supervisors, but as positive management strategies.

Experienced supervisors who have struggled to manage candidates over extended periods of time often say they wished they had acted sooner to bring some relationship to a close, so the expended energy and resources could have been used on more deserving candidates. As one supervisor indicated it is important to recognise the signals that indicate it is time 'to stop being nice'. Dealing with fading candidatures is a reality of the supervision process and a necessary skill for supervisors.

The supervisor takes the lead in confronting the new situation and re-planning and rationalising the research project to fit that situation. It may even be necessary to explore other pathways for the study and place these options as agenda items for supervision meetings. This may provide a shock that the student requires to:

- recognise and accept the changed circumstances,
- let go of previous expectations and approaches, and
- make the changes needed to successfully complete the research journey.

Universities have different formal and informal options that change as the policy environment changes. Supervisors should consult widely to canvas the options available when confronting such situations and use their collegiate support structures to achieve mutually acceptable resolutions. The principal supervisor should:

- consult widely to map out the potential options for the specific candidature, so that it is possible to broaden the discussion with the student and be secure in the knowledge that any agreement made will be acceptable to the relevant related post holders.
- The principal supervisor should also review the candidature and assess what impacted upon the study and what strategies can be learned from the situation. This may require a separate and subsequent exit interview.

Tools

As shown below, this component currently has only one tool.

Component	Relevant tools
I. Early exit/downgrading of thesis	I1.1 Taking action about downgrading/ termination of candidature

I1.1 Taking action about downgrading/terminating candidature

Introduction

Termination of candidature means only that under a specific set of circumstances, a particular student was not considered capable of completing a specific research project in accordance with institutional policy and guidelines and using the available support and resources at a particular institution. That student may, however, still be capable of completing a research higher degree under different circumstances.

The option of termination of candidature has to be considered where there is evidence of ongoing marginal progress or unacceptable behaviours (including serious academic misconduct) by a student and all attempts taken to improve the candidate's progress have been ineffective. As HDR students should receive both verbal and written warnings regarding a lack of progress in a period where set remedial tasks and goals are not met, discussions of termination of candidature should NEVER come as a surprise to a HDR student.

If termination of candidature is not to be experienced or perceived as a disaster for the student and as a career setback or permanent black mark for the supervisory team and the student's support network, then consideration needs to be given to devising and implementing an optimal exit strategy to:

- minimise the damage to the student, the supervisors, the university and other parties involve in supporting that student's candidature, and
- allow all parties to gain useful learning from the termination action.

Part 1. Cases to consider

Consider the three cases described in the table below.

Case ID	Case Description
1	Despite the best efforts of yourself and other members of the supervisory team, a student awarded marginal progress in a previous semester appears to have done no productive work this semester. The student has been given regular feedback verbally and in writing about this lack of progress. The end of semester is now very close and the student appears to have no hope of achieving the agreed milestones.
2	Despite the best efforts of yourself and other members of the supervisory team, a student has engaged in serious academic misconduct encompassing both unauthorised data collection and extensive plagiarism.
3	Despite the best efforts of yourself and other members of the supervisory team, a student has repeatedly behaved in ways that threatened the health and safety of staff and students at your university.

Part 2. Question sets to assist in addressing each case

Now use the seven sets of questions below to help formulate your response to each of the three cases described in that table.

1. What are the benefits of terminating the candidature of this student? Would the student be better off moving to an endeavour where there skills are more appropriate? What time, effort and resources could be reallocated to more productive purposes? What evidence do you have for this?
2. What, if anything, can be salvaged from the work the student has done to date? Is it still feasible to consider converting the planned PhD project to a Masters project? Has the student's work provided the base for any publications? What evidence do you have for this?
3. What would be the optimal exit strategy for a student whose candidature is terminated? (Consider

issues relating to scholarships, visas and job prospects as well as mental and physical health)

4. What lessons can your supervisory team, school and university learn from the experience with this student?
5. How will you raise the prospect of terminating the student's candidature with:

- the other members of your supervisory team,
- the student,
- your Head of School,
- your Associate Dean Research,
- other parties involved in supporting that student, and
- other parties involved in the process to terminate candidature?

6. What formal communication and meetings do you need to arrange? Who needs to attend those meetings? How can you best prepare for those meetings? What documentation do you need to assemble? Will it help to rehearse or role-play these meetings?
7. How will you safeguard your own mental and physical health and that of the other involved parties during and immediately after the termination process?

J. Completion and career

Introduction

Submission of a thesis opens up a significant space in the student's life as with familiar daily tasks and passion for the project are displaced by waiting for three examiners to respond to a thesis representing several years work displaces engagement with familiar daily thesis-related tasks fuelled by passion for the project. This is a time when continued meetings with the supervisor can be very important both in supporting the student emotionally and in planning future action.

Emotionally, the student has placed all personal resources into the completing of a life work and in most cases given only limited thought to what follows. A supervisor who has become a valued and consistent mentor can continue that mentoring relationship by preparing the student for the challenge of responding to examiner critique. It is often necessary to persist in reminding the student that the journey is not yet complete and that some examination processes and resubmission processes can take longer than a year.

The completion of thesis, the submission for examination and the award of the degree are all significant events for both the candidate and the supervisor. These events may mark the culmination of the relationship, or merely the start of continued research production.

Career planning during candidature

To help the candidate plan a research career, the supervisor should focus on the development of career skills, networking and contacts, and encourage ambitions throughout the candidature. Some ways of doing this include:

- encouraging attendance at research seminars, research centre seminars, and journal clubs,
- ensuring interactions with quality researchers,
- encouraging acceptance of sessional teaching opportunities,
- promoting conference experiences, particularly international ones,
- encouraging publishing,
- promoting interaction with other students in the discipline, and
- providing skills, help or consultants to help at the right time.

Discussing and preparing for the future

After the submission of a thesis, there is time to focus on what could be next. This may involve a range of options for discussion. The supervisor should:

- focus on preparing the candidate to respond to the examiners' comments and developing the candidate's capability to respond to reviewers in the future,
- review the candidature and gain feedback and the effectiveness of the process, perhaps using the critical incident technique.
- review the network that the student has generated, both in terms of relations and in terms of academic links and passions and consider how that network can be developed,
- begin planning a publication plan with targeted journals, conferences and an analysis of how many components of the thesis can be mined and what disciplines the thesis can be linked towards, and
- encourage the candidate to use the university careers service to plan opportunities and career options for the future.

The University may also consider using post candidature exit interviews to gather feedback on HDR student support services within the institution.

Tools

As shown below, this component has two subcomponents each with its own specific tool.

Subcomponent	Relevant tools
J1. Exit after completion	J1.1 Exit interviews
J2. Nurturing post-exit relationships	J2.1 Post-PhD relationships – some issues to consider

J1.1 Exit interviews on completion

It is not yet standard practice in Australian universities to conduct exit interviews with candidates, who successfully complete higher degrees by research.

Exit interviews can be viewed as:

- contributing to the process of continually improving supervisory practice and the support networks for higher degrees by research students,
- acknowledging the achievement of completing a higher degree by research, and
- providing a forum for a wide-ranging discussion about the graduate's future relationship with university and its researchers.

The candidate's exit interview could be linked to:

- an 'exit seminar' delivered by the completing candidate, and/or
- an exit interview for the candidate's supervisory team.

Part 1. An exit interview for the candidate

Below is a set of questions that could be asked at an exit interview. Do you agree with these questions? Can you suggest changes?

Topic	Question
Supervision	Were your supervision arrangements satisfactory? What was the best aspect? Why What was the worst aspect? Why
Other support and resources	Which supports and resources did you find most useful during your research journey? Which support and resources did you find most useful during your research journey? Did a lack of support and resources impact on your research journey
General	If you could turn back time to the start of your research journey, is there anything you would choose to do differently? What advice would you give person thinking about undertaking a research higher degree at this university? What were the most useful knowledge, skills and attitudes you acquired during your research journey?
Future relationships	How do you envisage your future relationships with: • the members of your supervisory team? • the university and its researchers?
Future research and work directions	What sort of research or other work do you expect or want to be doing: • in the next 12 months? • In 5 years time?

Part 2. An exit interview for the candidate's supervisory team

Do you think the supervisory team should conduct a final debrief or do an 'exit interview' on the experience of supervising a particular candidate? How might this contribute to improved supervisory practice?

Below is a set of questions that could be asked at an exit interview with a supervisory team. Do you see any value in asking these questions? Can you suggest better questions?

Topic	Question
Supervision arrangements	Were your supervision arrangements satisfactory? What was the best aspect? Why What was the worst aspect? Why
Other support and resources	Which supports and resources did you find most useful during your supervision relationship? Which support and resources did you find most useful during your supervision relationship? Did a lack of support and resources impact on your supervision relationship?
General	If you could turn back time to the start of that supervision relationship, is there anything you would choose to do differently? Have your supervisory practice or views on supervision changed as a result of this supervision relationship? What advice would you give a person thinking about supervising a research higher degree at this university?
Future relationships	How do you envisage your future relationships with: • the completing candidate? • the other members of this supervisory team?

J2.1 Post-PhD relationships – some issues to consider

Post-PhD relationships with a graduated student can include:

- publications (perhaps in line with the publication plan developed during the research higher degree),
- research work (e.g. postdoc positions, research grants, other research jobs),
- commercialisation,
- acting as a referee for the new graduate apply for jobs or adjunct appointments, and
- providing career advice regarding further study or teaching/tutoring opportunities.

Some supervisors contend that the quality of the post PhD relationships is the best indicator of the quality of the supervisory relationships. If this is so, how might the quality of the post PhD relationships and the quality of the supervisory relationships be evaluated and improved?