Introduction by the Pro-Vice-Chancellor

Welcome to Newcastle University.

As one of the UK’s leading research universities we regard research students as a particularly important part of our academic community. The graduate culture, its development and enhancement, is a key priority in our Learning, Teaching and Student Experience Strategy. Your performance as a Postgraduate Research Student can significantly impact on the research reputation of the University. In the recent Research Excellence Framework (REF) students contributed positively through their publications and timely completion and submission of their theses.

Newcastle University is fully committed to the education and training of its research students. We recognise the essential purpose of a research degree programme is training in research and generation of an original piece of work. In addition, we are also aware of the importance of providing our postgraduate research students with opportunities to develop skills beyond those of an effective researcher, including personal, professional and career management skills.

Each Faculty has a Dean, responsible for postgraduate students, who ensures that arrangements are in place to support each student’s progress through his or her research degree. In addition to the opportunities within your subject area to work with other researchers, you will be able to meet and interact with researchers from other disciplines in your Academic Unit and Faculty.

This Handbook for Research Students contains a wealth of information about the nature and level of support you may expect to receive during your study. You are strongly encouraged to use it, and use the University’s facilities, advice and support services during your studies to enhance your period of study as a research student.

I wish you the very best success with your studies.

S. [Signature]

Pro-Vice-Chancellor for Learning and Teaching
This handbook provides advice and guidance for Postgraduate Research Students and Research Supervisors and highlights key activities that Postgraduate Research Students should be aware of.

An online version of this handbook is available at: http://www.ncl.ac.uk/students/progress/student-resources/PGR/

This handbook should be read in conjunction with the University Regulations, Student Guide, Newcastle University’s Student Charter and the University Handbook for Examiners of Research Degrees by Theses.

Regulations: http://www.ncl.ac.uk/regulations/docs/


Student Charter: http://www.ncl.ac.uk/pre-arrival/regulations/#studentcharter

University Handbook for Examiners of Research Degrees by Theses: http://www.ncl.ac.uk/students/progress/assets/documents/Examinerhandbook1718.pdf

Contents

Introduction by the Pro-Vice Chancellor

Part One - Sources of Advice and Assistance for Postgraduate Research Students 1
- Research Student Support Team/Medical Sciences Graduate School 1
- Academic Support 2
- Study Skills 2
- Student Services Information - Finance, Facilities and Services 3
- Other Useful Guidance and Information 5

Part Two – Code of Practice for Research Degree Programmes 8

Part Three – Academic Matters: Research Guidelines 35
- Postgraduate Research ePortfolio 35
- Guidelines for Research Students and Supervisors of Research Students 38
- Good Practice for Research Students 44
- Good Practice in Research Supervision 67

Part Four – Academic Matters: Regulations, Policies and Procedures 88
PART ONE - SOURCES OF ADVICE AND ASSISTANCE FOR POSTGRADUATE RESEARCH STUDENTS

Research Student Support Teams/Medical Sciences Graduate School

Each Faculty has a Graduate School Administrator who leads a team of staff supporting Postgraduate research student administration. In the Faculty of Humanities and Social Sciences (HaSS) and the Faculty of Science, Agriculture and Engineering (SAgE) this team is the Research Student Support Team (RSST). In the Faculty of Medical Sciences, this team is the Medical Sciences Graduate School (MSGS).

Examples of the issues that the Graduate School Administrators, RSST and MSGS deal with are:

- Student Registration;
- Student Progress (including MPhil/PhD upgrades, confirmation of candidature, interruptions of study, extensions to thesis submission dates, academic concessions, appointment of examiners, the PGR examination process and pass lists);
- Research Students' project approval and annual progression;
- Advice on University and programme regulations and PGR policies and procedures;
- Complaints, academic appeals, student discipline, assessment irregularities;

Relevant Information and forms for these processes can be found at:
http://www.ncl.ac.uk/students/progress/student-resources/PGR/

Research Student Support Team
King's Gate
Level 2
Newcastle University
Telephone: +44 (0) 191 208 6206
E-mail: rssteam@ncl.ac.uk

Medical Sciences Graduate School
Ridley Building 1
Level 3
Newcastle University
Telephone: +44 (0) 191 208 7002
E-mail: medpg-enquiries@ncl.ac.uk

Each Faculty has a Dean of Postgraduate Studies who is responsible for leading the implementation of the Faculty's postgraduate strategy and its quality assurance of the postgraduate research programmes. Each Faculty also has a Postgraduate Tutor who has considerable experience of postgraduate matters and who can offer impartial and confidential advice. The postgraduate tutor is independent of the structures within the Faculty that deal with the academic progress of research students and can be consulted in confidence at any stage of your research.

Faculty of Humanities and Social Sciences
Dean of Postgraduate Studies Professor Helen Berry
Graduate School Administrator Ms Lizzie Taylor (Acting until October 2017)
Faculty Postgraduate Tutor Professor Robin Humphrey and Dr Laura Leonardo
PART ONE - SOURCES OF ADVICE AND ASSISTANCE FOR POSTGRADUATE RESEARCH STUDENTS

Research Student Support Teams/Medical Sciences Graduate School
Each Faculty has a Graduate School Administrator who leads a team of staff supporting Postgraduate research student administration. In the Faculty of Humanities and Social Sciences (HaSS) and the Faculty of Science, Agriculture and Engineering (SAgE) this team is the Research Student Support Team (RSST). In the Faculty of Medical Sciences, this team is the Medical Sciences Graduate School (MSGS).

Examples of the issues that the Graduate School Administrators, RSST and MSGS deal with are:
- Student Registration;
- Student Progress (including MPhil/PhD upgrades, confirmation of candidature, interruptions of study, extensions to thesis submission dates, academic concessions, appointment of examiners, the PGR examination process and pass lists);
- Research Students' project approval and annual progression;
- Advice on University and programme regulations and PGR policies and procedures;
- Complaints, academic appeals, student discipline, assessment irregularities;

Relevant Information and forms for these processes can be found at: http://www.ncl.ac.uk/students/progress/student-resources/PGR/

Research Student Support Team
King’s Gate
Level 2
Newcastle University
Telephone: +44 (0) 191 208 6206
E-mail: rsssteam@ncl.ac.uk

Medical Sciences Graduate School
Ridley Building 1
Level 3
Newcastle University
Telephone: +44 (0) 191 208 7002
E-mail: medpg-enquiries@ncl.ac.uk

Each Faculty has a Dean of Postgraduate Studies who is responsible for leading the implementation of the Faculty's postgraduate strategy and its quality assurance of the postgraduate research programmes. Each Faculty also has a Postgraduate Tutor who has considerable experience of postgraduate matters and who can offer impartial and confidential advice. The postgraduate tutor is independent of the structures within the Faculty that deal with the academic progress of research students and can be consulted in confidence at any stage of your research.

Faculty of Humanities and Social Sciences
- Dean of Postgraduate Studies: Professor Helen Berry
- Graduate School Administrator: Ms Lizzie Taylor (Acting until October 2017)
- Faculty Postgraduate Tutor: Professor Robin Humphrey and Dr Laura Leonardo

Sources of Advice
Sources of Advice

Faculty of Medical Sciences
- Dean of Postgraduate Studies: Professor John Kirby
- Graduate School Administrator: Mrs Barbara Sumner
- Faculty Postgraduate Tutor: Dr Alison Tyson-Capper

Faculty of Science, Agriculture & Engineering
- Dean of Postgraduate Studies: Professor Selina Stead
- Graduate School Administrator: Ms Elaine Urwin
- Faculty Postgraduate Tutor: Dr Ben Horrocks

Students wishing to make an appointment to meet with a Graduate School Administrator, Dean of Postgraduate Studies or Faculty Postgraduate Tutor should contact RSST/MSGS in the first instance.

Academic Support
Your main supervisor should be the first person you turn to for help and advice on a personal basis, for example if you are encountering any difficulties in your study or in things which affect your study. Most difficulties can be easily resolved through your supervisor, though he or she may sometimes suggest that you contact one of the many support services throughout the University for specialised information or support.

It is recognised that occasionally a research student may not feel able to approach a supervisor about a particular matter. If you are in such a position, you should discuss the matter with your head of school. If for some reason you do not feel able to discuss the difficulties with your supervisor or head of school, there are several sources of advice within the University including school (e.g. school postgraduate tutor), faculty (e.g. dean of postgraduate studies or graduate school administrator) and University services (e.g. the Student Wellbeing Service, the Student Progress Service and the Union Society's Student Advice Centre).

Study Skills
University study requires each individual student to take significant responsibility for organizing their own work. Information and advice about study skills are available from a number of sources around the University. Some of these may prove helpful to you:
- You should attend what is offered on your faculty research training programme (see the relevant Faculty webpage) as this has been compiled to provide generic skills expected of researchers in your field of study;
- The University Library has a wide range of resources and services to support research students. Visit the Research Support section of its website for more information: http://www.ncl.ac.uk/library/research-support/
- The Education Unit within the Union Society offers advice and occasional training sessions aimed at specific groups of students;
- Specialist Learning Advisers in the Student Wellbeing Service (based in King’s Gate) can
assist students with dyslexia and related difficulties;

- The Writing Development Centre offers support with writing skills, see [http://www.ncl.ac.uk/students/wdc/](http://www.ncl.ac.uk/students/wdc/);

- Finally, Part Three of this Handbook offers comprehensive Guidelines for Research Students which include a range of suggestions for study.

## Student Services Information

There are many services available to staff and students in the University. Included here is brief information on the main services.

### Tuition Fees

Fees payable by postgraduate students are set out in the University [Fees Schedule](http://www.ncl.ac.uk/regulations/fees/) and are subject to an annual increase: [http://www.ncl.ac.uk/regulations/fees/](http://www.ncl.ac.uk/regulations/fees/)

Students whose tuition fees are to be paid by a sponsor or funding body are asked to provide official letters of sponsorship/funding as evidence that their fees will be paid, either during or prior to Registration. A new letter maybe required annually at registration depending on your sponsor. Letters from family members and friends cannot be accepted as sponsorship/funding letters for fees purposes.

If you are responsible for payment of your own tuition fees (or part payment) and you wish to pay your fees in full before or at the time of registration, you will be entitled to a 2% discount on the proportion of your tuition fees for which you are personally liable. If you do not take advantage of the 2% discount you will need to pay your fees in two equal instalments, the first instalment being when you complete your registration and the second at the end of January 2018.

Information on payment methods can be found in the Student Guide 2017-18 available at: [http://www.ncl.ac.uk/media/wwwnclacuk/pre-arrival/Ncle%20Uni%20Student%20Guide%202017-18%20.pdf](http://www.ncl.ac.uk/media/wwwnclacuk/pre-arrival/Ncle%20Uni%20Student%20Guide%202017-18%20.pdf)

### Financial Support

The Student Financial Support Team is part of the Student Wellbeing Service and administers various financial support schemes to assist students as well as providing information, advice and guidance about student finance related matters.

More information is available in the [Student Guide](http://www.ncl.ac.uk/students/wellbeing/finance) and at: [http://www.ncl.ac.uk/students/wellbeing/finance](http://www.ncl.ac.uk/students/wellbeing/finance)
Other Useful Guidance and Information for PGR Students

Council Tax
Most students under candidature are entitled to some form of exemption or discount, but this depends on individual circumstances. Students who are exempt from paying Council Tax must submit a Student Exemption application form to their local council as well as a Student Certificate providing details about their course. Students living within the Newcastle City Council area can complete an online exemption/discount form at: http://www.newcastle.gov.uk/benefits-and-council-tax (Newcastle City Council Tel: 0191 278 7878)

For more information see:
http://www.ncl.ac.uk/students/progress/student-resources/PGR/RegistrationFAQs.htm
http://www.ncl.ac.uk/students/wellbeing/finance/advice/counciltax.htm

Health and Safety
Newcastle University offers our postgraduate students the opportunity to study and/or research in a wide range of subjects across many disciplines. The activities entailed can generate a diverse spread of hazards and some of these can pose significant dangers. To facilitate these activities and avoid serious accidents, it is critical that these hazards are effectively controlled. The University does this through a variety of policy and other arrangements.

You are encouraged to liaise closely with your Academic Supervisor, your School or Institute Safety Officer, other local staff or Advisers from the central University support team in Occupational Health and Safety Service (OHSS) who can help to advise you further, if required. Further information is available at:
http://www.ncl.ac.uk/ohss/about/policy.htm

Health and Safety Training
Each Faculty will provide a health and safety induction and training for students. The precise format and number of safety courses will be decided by each Faculty. Students should discuss their training needs with their supervising academic and are expected to attend any health and safety training they need having regard to their work activities. Students may not be allowed to carry out certain high-risk work activities until they have been trained, e.g. work with ionising and non-ionising radiation.

Registration with GP/Dentist
Students are required by the University Regulations to register with a local doctor/General Practitioner (GP). You should register as soon as possible when you arrive in Newcastle. It is also advisable for students to register with a dental practice. Further information is available at: www.ncl.ac.uk/students/wellbeing

Student Wellbeing Service
The Student Wellbeing Services provides information, advice and guidance to postgraduates on a wide range of student support issues:
- Student Financial Support
- Support for disabled students
- Specialist learning support
- Support for students with long-term mental health conditions
- Counselling and therapeutic support including one-to-one sessions, group work and signposting to specialist services, as needed

The service is offered free, confidential and available to all students throughout the year and at any time during their University career. Further information is available at: www.ncl.ac.uk/students/wellbeing

Visa Support
Visa support is provided within the Student Progress Service in King’s Gate. The Visa Team is authorised to provide free, impartial and confidential immigration information and advice for International students on a wide range of visa and immigration enquiries. The types of visa and immigration advice available from this service include:
- Tier 4 applications within the UK
- Tier 4 and Short-Term Study entry clearance procedures
- Issues relating to dependant visas
- Police registration requirements
- Working during and after studies
- Travelling within the Schengen space

For further details see: http://www.ncl.ac.uk/students/progress/visa

As immigration policy can change regularly, you should check the latest official immigration guidance for students on the following Government websites:
UK Council for International Student Affairs (UKCISA): http://www.ukcisa.org.uk

Other Student Services
Further information on the following and other Student and Academic Support services can be found in the Student Guide:
- The Library
- Newcastle University IT Services
- Careers Service
- Accommodation Services
- Language Support
- Newcastle University Students’ Union
- Sport & Physical Wellbeing at Newcastle University
Other Useful Guidance and Information for PGR Students

Council Tax
Most students under candidature are entitled to some form of exemption or discount, but this depends on individual circumstances. Students who are exempt from paying Council Tax must submit a Student Exemption application form to their local council as well as a Student Certificate providing details about their course. Students living within the Newcastle City Council area can complete an online exemption/discount form at: http://www.newcastle.gov.uk/benefits-and-council-tax (Newcastle City Council Tel: 0191 278 7878)

For more information see:
http://www.ncl.ac.uk/students/progress/student-resources/PGR/RegistrationFAQs.htm
http://www.ncl.ac.uk/students/wellbeing/finance/advice/counciltax.htm

Health and Safety
Newcastle University offers our postgraduate students the opportunity to study and/or research in a wide range of subjects across many disciplines. The activities entailed can generate a diverse spread of hazards and some of these can pose significant dangers. To facilitate these activities and avoid serious accidents, it is critical that these hazards are effectively controlled. The University does this through a variety of policy and other arrangements.

You are encouraged to liaise closely with your Academic Supervisor, your School or Institute Safety Officer, other local staff or Advisers from the central University support team in Occupational Health and Safety Service (OHSS) who can help to advise you further, if required. Further information is available at: http://www.ncl.ac.uk/ohss/about/policy.htm

Health and Safety Training
Each Faculty will provide a health and safety induction and training for students. The precise format and number of safety courses will be decided by each Faculty.

Students should discuss their training needs with their supervising academic and are expected to attend any health and safety training they need having regard to their work activities. Students may not be allowed to carry out certain high-risk work activities until they have been trained, e.g. work with ionising and non-ionising radiation.

Registration with GP/Dentist
Students are required by the University Regulations to register with a local doctor/General Practitioner (GP). You should register as soon as possible when you arrive in Newcastle. It is also advisable for students to register with a dental practice. Further information is available at: www.ncl.ac.uk/students/wellbeing/medical
**Procedure in the case of illness**
If illness prevents you from studying at any time whilst you are a student at the University, you should inform your supervisor immediately. If you are absent from the University through illness for more than three working days, you must complete a Student Notice of Absence form available on the University’s website. If illness prevents you from studying for more than seven working days, you must obtain a medical certificate from your GP and forward it to your School/Institute as soon as possible, in addition to completing the Student Notice of Absence form. Further information is available at: http://www.ncl.ac.uk/students/progress/Regulations/SPS/Attendance/

**Postgraduate Student Travel and Outside Study Policy**
This Policy outlines the University’s requirements when Postgraduate students (on Taught and Research programmes) are participating in travel and outside study (off-campus and abroad) and refers to relevant insurance implications and guidelines for students and their tutors / supervisors / advisers.

The University normally provides automatic and free travel insurance to current registered Newcastle University postgraduate students travelling overseas on official University business. However, there are occasions where the University may not be able to provide travel insurance, even if a student is travelling on official University business and students should consult the relevant policies for full details.

Further information is available at:
PG Travel Policy: http://www.ncl.ac.uk/students/progress/assets/documents/PGStudent-Travel-Outside-Study-PolicyJuly15.pdf

Insurance Cover and Procedures:
http://www.ncl.ac.uk/internal/finance/insurance/cover/travel_pg.htm

**Crime Prevention and Personal Safety**
Newcastle upon Tyne is renowned as a safe city to live in, and has one of the lowest rates in Britain of students experiencing crime. It’s easy to become frightened of crime when you read the newspapers and hear stories from other students, but these often paint a worse picture than is true. However, as in any city, you must take care to keep yourself and your possessions safe. Newcastle University does have a dedicated Police Officer attached to the University for anyone who wants to talk with the police; they can be contacted through security on 6817 (0191 208 6817).

**Information on staying safe**
Personal safety advice and details on how to report any incidents is available on the University Security website at:
http://www.ncl.ac.uk/estates/services/security/personalsafety.htm
Procedure in the case of illness

If illness prevents you from studying at any time whilst you are a student at the University, you should inform your supervisor immediately. If you are absent from the University through illness for more than three working days, you must complete a Student Notice of Absence form available on the University's website. If illness prevents you from studying for more than seven working days, you must obtain a medical certificate from your GP and forward it to your School/Institute as soon as possible, in addition to completing the Student Notice of Absence form. Further information is available at:

http://www.ncl.ac.uk/students/progress/Regulations/SPS/Attendance/

Postgraduate Student Travel and Outside Study Policy

This Policy outlines the University's requirements when Postgraduate students (on Taught and Research programmes) are participating in travel and outside study (off-campus and abroad) and refers to relevant insurance implications and guidelines for students and their tutors / supervisors / advisers.

The University normally provides automatic and free travel insurance to current registered Newcastle University postgraduate students travelling overseas on official University business. However, there are occasions where the University may not be able to provide travel insurance, even if a student is travelling on official University business and students should consult the relevant policies for full details.

Further information is available at:
PG Travel Policy: http://www.ncl.ac.uk/students/progress/assets/documents/PGStudent-Travel-Outside-Study-PolicyJuly15.pdf

Insurance Cover and Procedures:

http://www.ncl.ac.uk/internal/finance/insurance/cover/travel_pg.htm

Crime Prevention and Personal Safety

Newcastle upon Tyne is renowned as a safe city to live in, and has one of the lowest rates in Britain of students experiencing crime. It's easy to become frightened of crime when you read the newspapers and hear stories from other students, but these often paint a worse picture than is true. However, as in any city, you must take care to keep yourself and your possessions safe. Newcastle University does have a dedicated Police Officer attached to the University for anyone who wants to talk with the police; they can be contacted through security on 6817 (0191 208 6817).

Information on staying safe

Personal safety advice and details on how to report any incidents is available on the University Security website at:

http://www.ncl.ac.uk/estates/services/security/personalsafety.htm
PART TWO - NEWCASTLE UNIVERSITY CODE OF PRACTICE FOR RESEARCH DEGREE PROGRAMMES

In instances where the Code of Practice refers to the Dean of Postgraduate Studies or Head of School/Institute, this role could be undertaken by an approved nominee.

Introduction
1. Newcastle University is a leading research-intensive university with a distinguished record of advancing knowledge and understanding through the pursuit of research and scholarship. As part of its commitment to research it provides, through its three-faculty structure, a range of research programmes designed to enable postgraduate students to undertake research training and to make their own contribution to knowledge and understanding in their subject.

2. The purpose of this Code of Practice is to set out the University’s standards for its research programmes.

3. This Code of Practice will be used by PhDs, MPhils, MDs and the thesis element of any doctorate level programme including Integrated PhDs and Professional Doctorates. Any doctoral programme wishing to be exempt will require ULTSEC approval. (Please see the addendum at the end of the code for clarification on standards relating to research masters’ programmes).

The Research Environment
4. The University will only permit research programmes to be offered where it is confident that students can be trained and supported within an environment which is supportive of research.

5. It defines such an environment as where a subject School/Institute:
   - Is able to demonstrate significant international research excellence as demonstrated by the Research Assessment Exercise (RAE)/ Research Excellence Framework (REF)
   - Has a critical mass of staff to act as suitable supervisors
   - Satisfies the requirements of the University Quality Assurance and Enhancement Framework including acceptable submission and completion rates that meet the requirements for the Research Council in that subject area.
   - Provides appropriate facilities.

6. The University defines provision of facilities to meet the appropriate standard as follows:
   - **Working Space**
     Doctoral students can expect working space in appropriate shared office/open-plan/hot-desk accommodation, with adequate access, heating, ventilation and security arrangements. Students should be given reasonable space for the secure and safe storage of essential books, consumables, personal belongings and research data. In addition, students undertaking laboratory/studio based research projects can expect
access to bench/studio space and associated facilities (see below). If there is disruption to students’ working space, as a consequence, for example, of maintenance or construction work, then students can expect to be advised by their School/Institute regarding the impact on their study, and can expect reasonable steps to be taken to minimise any such disruption including, if necessary, provision of alternative accommodation.

- **Access to Laboratory/Studio Space etc. (where relevant)**
  Doctoral students can expect to be given bench space and facilities to conduct their approved research project, including any laboratory consumables and access to equipment and facilities agreed by the project approval panel to be necessary and within the budget for that project. Equipment approved for the research project will be provided in a timely manner and maintained in good working order throughout the project. Students will receive proper health and safety training in the use of the necessary equipment and consumables, and should receive an induction into the required conduct and working practices of the laboratory/studio.

- **Consumables**
  Doctoral students can expect to be provided with:
  - Appropriate supply of normal office consumables, including paper for black and white printing on campus.
  - Access to reasonable black and white photocopying, as agreed with their supervisor in connection with their doctoral study.
  - Where the student is using a computer work station, it shall comply with the schedule to the Health and Safety (Display Screen Equipment) Regulations.
  - Lab/day books as needed.
  - Access to a telephone, with reasonable telephone calls in connection with their research, which may be logged.

- **IT Equipment**
  Doctoral students can expect access to a networked PC and printer. They should have access to a scanner, if and when needed. Where the research project so requires, a doctoral student can expect to have access to a more powerful PC capable, for example, of handling complex, large-set data analysis, or set up with specialist software in line with their approved project.

- **ePortfolio**
  All students should have access to ePortfolio and are required to maintain and record formal supervisions, training, project approval and progress.

- **Funding for Conference Attendance and Travel**
  Doctoral students should have a reasonable opportunity to attend and/or participate in a conference, with the agreement of their supervisor and subject to available funding. Schools/Institutes should have a budget for travel and conference attendance and a fair and equitable scheme for the distribution of this funding. This may be devolved to a subject/research group. A record of attendance should be kept on ePortfolio. Schools/Institutes may also make grants available for attendance at training events held outside Newcastle.
- **Social Facilities**

To facilitate social interaction, doctoral students can expect to have access to common room facilities, which may combine with staff common rooms if this is agreed by the School/Institute.

7. In the case of Schools/Institutes or research groupings which for any reason do not meet the normal criterion the University may, on the advice of the relevant Dean of Postgraduate Studies, authorise the offering of research degrees where there is evidence that research of at least national standing is being undertaken in the applicant’s specific subject and that the other conditions set out above have been or will be met.

**Pre-Entry Information**

8. In order to enable students to make an informed choice, the University requires that units offering research degrees provide clear, accurate and comprehensive pre-entry information to potential applicants. This should inform them as fully as possible about the relevant programme including research opportunities, training, resources, completion times, expectations and demands upon research students (including financial ones), entry requirements, the admissions process, information about scholarships, and appropriate contacts. Pre-entry information should also give relevant information for potential applicants with disabilities and a contact in the Student Wellbeing Service.

**Entry Standards and Applications**

9. The University defines the minimum standard for admission to research programmes as normally an Upper Second Class Honours degree in a relevant subject or a relevant Master’s degree. Any subject-specific qualification requirements should be identified to applicants via the University’s prospectus or School/Institute research grouping information.

10. In addition, for applicants whose first language is not English, the University requires evidence of acceptable competence in the language to be submitted at the time of application.

11. All applicants are required to submit the names of two recent academic referees or one academic and a professional employer who can comment knowledgeably upon their suitability for research in the relevant field.

**Selection of Research Students**

12. In order to assist the match between student, research project, supervisor(s) and institution the University requires that there should be rigorous selection policies and procedures.

13. The University requires that selection policies and procedures should be put in writing. These should normally include:

- a policy of involving at least two experienced and research-active academics in the selection process, normally one of whom will form part of the supervisory team
and one will act on behalf of the Head of School/Institute to approve the offer of a place:

- who have been informed about selection of research students;
- who are fully cognisant with University and statutory policies on equal opportunities;
- who are aware of the support infrastructure for students with special needs;
- a policy of interviewing shortlisted applicants for doctoral degrees, where practical;
- a policy of taking up two references and, if one or more of these is not available at the time of offer, making the latter conditional upon the receipt of satisfactory references;
- clear selection procedures;
- making decisions on applications promptly and keeping applicants informed during the admissions process.

Letters of Offer
14. Once it has been decided to accept an applicant, a formal offer has to be made. The letter of offer should be accompanied by: information on fees and any other charges; the broad research topic and the length of study; arrangements for their supervision; and should direct applicants to requirements upon them (including attendance, progress reports, contact, enrolment and registration); expectations in terms of academic and social conduct and performance, and requirements; the availability of research training; and direction to other relevant information, e.g. the institutional policy on IPR. Applicants should assure themselves that they have sufficient financial support to complete the degree.

Induction into the University and the Faculty
15. The University requires Faculties to provide students with an appropriate induction programme within three months of registration to enable them to acquire an understanding of the academic and social environment within which they will be working.

16. The induction programme should include:

an introduction to the University including:
- its history and development
- relevant regulations, policies and procedures relating to research degrees

an induction into matters relating to students’ relationship with the institution including:
- the University’s expectations of research students;
- the challenges typically faced by research students;
- institutional facilities available to students including the learning support infrastructure;
- institutional provision for student welfare and other support arrangements;
- complaints and appeals procedures.

an induction into matters relating to students’ progress administered by the Graduate
School Administrator and research student support staff including:

- nominated contacts for support and advice outside the supervisory team;
- the specific facilities/training opportunities available to students within the Faculty;
- provision within the University for student welfare and other support arrangements.
- information about the opportunities to meet other research students and staff and about opportunities to broaden their knowledge through seminars, conferences, forums etc.

17. The University requires that the Faculty annually review the induction programme.

Induction into the Programme

18. The University requires that Schools/Institutes make appropriate arrangements for induction into the student’s programme of study. These should actively involve the designated academic supervisor and include inducting students into:

- the academic standards of the programme;
- the intended learning outcomes;
- the curriculum including the skills training programme and the research element of the individual project;
- methods of teaching and learning;
- assessment;
- regulations governing progression;
- subject-related research codes and ethics;
- programme-related health and safety requirements.

Learning Agreements

19. The University requires Schools/Institutes ensure that research students have received, understood, and accepted the expectations of their research programme. The latter should be set out in a formal Learning Agreement, which should be signed by the student and by the supervisor/s on behalf of the University within one month of starting the programme. Schools should ensure that a copy of the signed Learning Agreement is forwarded to the relevant Graduate School Administrator so that completion can be recorded on the student record. A discussion on a student’s training needs should also be undertaken at this stage.

20. The student and supervisor should also discuss whether the signing of a confidentiality agreement is required and if so, this should be forwarded to the relevant Graduate School Administrator, along with the Learning Agreement.

The Development of Relevant Knowledge and Skills

21. The University requires that Faculties should ensure that research training programmes offer students the opportunity to develop a relevant range of knowledge and skills, including skills for employment. It requires that the learning outcomes of such programmes are consistent with the Vitae Researcher Development Framework.

22. The University requires that, for individual research students, Schools/Institutes should make appropriate arrangements:

- to identify their training needs;
- to identify gaps;
• to provide opportunities for development;
• to record the development of skills in ePortfolio;
• to ensure that students are introduced to relevant academic networks;
• to advise them on opportunities to attend and/or participate in seminars, and conferences;
• to encourage them to present papers;
• where appropriate, to encourage them to publish;
• to support career development.

23. The University requires that there should be appropriate access to formal research training programmes and to individual advice and support for all students, including those who are part-time, have special needs, or who are remote from the institution.

Research Students

24. The University requires that research students should inform their supervisors and the Graduate School Administrator about any sponsorship they have received for their research projects and obligations in terms of reporting to sponsors on progress.

25. The University requires that research students should attend induction programmes.

26. The University requires that research students should complete the research training programme and any prescribed taught courses, and successfully complete any assessments and/or examinations.

27. The University requires that research students, in conjunction with the supervisory team, agree a personal skills development programme. This should take into account their prior learning and experience, their needs in terms of study skills, the needs of their research project, and employment related skills. It requires that doctoral students actively seek to acquire relevant skills. This should be reviewed annually with the supervisory team, and the student should maintain an up-to-date Research Training ePortfolio.

28. It requires that research students maintain regular contact with supervisors. As a minimum, students should have regular contact with one member of their supervisory team at least ten times a year, approximately monthly with no more than an eight week gap between meetings, while they are in candidature. At least three of these meetings each year should include the full supervisory team. A formal interaction is a structured meeting whereby student and supervisor(s) engage in a meaningful discussion, e.g. discuss a piece of work and agree on an action plan. The meeting can take place in person, or at a distance (for example via Skype, if a student is away on fieldwork).

In cases where the student is not able to meet these requirements because they are studying outside the University, e.g. in another organisation as part of a CASE studentship or undertaking fieldwork, the student is required to agree an equivalent schedule of contacts with the academic supervisor, using for example E-mail and video-conferencing. Part-time students and those students engaged in distance learning should agree the frequency of the formal interactions with their supervisor equivalent to full-time students on a pro-rata basis as part of their Learning Agreement. The University requires that research students record and confirm the outcomes of meetings on ePortfolio.
29. In addition, students who are Tier 4 visa holders should continue to record and confirm the outcomes of their regular supervisory meetings, via ePortfollio while under examination through to completion of their studies, as a condition of their visa sponsorship. These meeting records and outcomes may be requested by the Home Office, as part of the University’s sponsorship duties.

30. Project proposals must be approved by an Independent School/Institute Panel and Head of School/Institute, before being submitted for approval by the relevant Dean of Postgraduate Studies. The panel should consist of at least two independent University members of academic staff (one of which can be an Honorary member of staff) with relevant skills and knowledge. All students should submit project proposals on ePortfollio within three months of starting their programme, even where a student’s project proposal has already been reviewed and approved by external peer review.

31. The University requires that research students take responsibility for listening to, understanding, and accepting feedback from the supervisory team and the panel.

32. The University requires that research students take responsibility for keeping their research project on track so that it is completed within the normal time-scale prescribed by their candidature.

33. It requires that academic problems with the research project should be promptly brought to the attention of the academic supervisor or the supervisory team so that they can provide support. It requires that non-academic problems with a bearing on the progress of the research (e.g. financial, social, domestic, or health problems) should be brought promptly to the attention of the academic supervisor or supervisory team.

34. The University requires that, each year, research students submit a progress report on the research project to a progress panel until submission of their thesis for examination. In addition, research students may be asked to provide one or more of the following as specified by their School/Institute;
- submission of a piece of work/lab book;
- give a presentation on their research
- undergo a viva or interview
- evidence of research training

35. It requires that research students contribute to the research environment by attending appropriate internal and external events, and give normally one formal presentation per year on their work. The University requires that these events are recorded in the student’s Research Training ePortfollio.

36. The University requires that research students be responsible for helping to improve research provision by providing feedback and through representation on relevant committees and decision-making bodies.

37. The University requires that research students abide by this Code of Practice. Where a research student does not abide by this Code of Practice the issue will be addressed under the Unsatisfactory Progress regulations by a Progress Panel.
Supervisory Arrangements

38. The University requires that supervision should normally be undertaken by a team consisting of at least two members (normally two members of Newcastle staff) with the appropriate research skills and knowledge, who should be registered on an approved list of supervisors held by the Faculty and therefore demonstrably research active. The minimum supervision percentage for a member of the supervisory team is 10%. Where for any reason this is not practical, for example where one supervisor is based outside the University, one supervisor from the approved supervisory list is acceptable provided that they also discharge the responsibilities of the academic supervisor outlined below. Where External Supervisors form part of the supervisory team, the Principles for External Supervision Arrangements should be consulted at:

http://www.ncl.ac.uk/quilt/assets/documents/qsh-externalsupervisionarrangements.pdf

39. Staff who have not previously supervised research students are required to undertake appropriate initial training and development, while experienced supervisors are normally expected to undertake continuing professional development relevant to the supervisory role, for example participate in Faculty supervisory updating sessions.

40. There are different models of supervisory team within the University. In joint supervision, the supervisory responsibilities are shared equally between members of the supervisory team. In other styles of supervision, different members of the supervisory team may have different roles. There may be, for example, a lead supervisor and a co-supervisor responsible for a smaller element of the planned research; or a lead supervisor and an advisor responsible for, and able to deal with, general and pastoral responsibilities. Since arrangements may vary, the supervisory team must agree a clear distribution of responsibilities at the outset of the research and update this if arrangements change. In all instances, one supervisor must be nominated as academic supervisor and this person is ultimately responsible for the quality assurance of the research programme. The academic supervisor:

- must be a member of the staff of the University;
- must have gained a doctoral degree or have equivalent experience of research;
- be demonstrably research-active;
- should normally have had previous experience of at least one successful supervision, whether as academic or co-supervisor, defined as taking the student all the way through to a research degree award.

In cases where the academic supervisor does not have such experience, the supervisory team must include another member who is a demonstrably active researcher with experience of at least two successful supervisions.

41. The academic supervisor is responsible for:

- being aware of the University’s Code of Practice for Research Degrees and other relevant University regulations
- completing a Learning Agreement, Training Needs Analysis and any appropriate risk assessments with the student, and ensuring Project Approval is undertaken
- providing the supervisory input to Annual Progress Review
42. In many instances, the academic supervisor will also be lead supervisor who will also be responsible for:

- introducing the student to the School/Institute, its facilities and procedures
- being the first point of contact in the supervisory team for the student
- agreeing with the student a suitable research field of enquiry
- research project management including arranging a timetable of regular meetings in line with the Code of Practice, requiring the student to keep a record of meetings and agreeing the outcome of meetings with them on ePortfolio
- arranging a realistic timetable for submission and completion in line with any Research Council requirements and the University’s maximum candidature
- requesting written work according to an agreed schedule and returning work with constructive criticism in a reasonable time, as agreed at the outset of the research with the student
- chairing formal supervisory meetings
- encouraging students to attend research training sessions within the University and where relevant externally, attend and present at conferences and seminars and signposting central services such as careers

43. Where there is a lead supervisor a co-supervisor supervisor should:

- be acquainted with the progress of the student’s work and attend formal supervisory meetings at least 3 times per year or additionally as required by the student or lead supervisor
- comment on the student’s work where required by the lead supervisor
- provide additional advice where required e.g. supervise specific elements of data collection, data analysis and thesis preparation
- assume the lead supervisor’s responsibilities if the original lead supervisor is unable to continue (e.g. through illness or departure)
- act as mentor or arbitrator if the student has any problems that cannot be resolved by the lead supervisor
44. Where supervisors share responsibilities more equally than outlined above (joint supervision) they should collectively agree the allocation of tasks while ensuring that one supervisor acts as academic supervisor. The responsibilities of different supervisors should be recorded on the project approval form and any changes communicated to the Graduate School Administrator. Supervisors of research students do not automatically have ownership of the research project undertaken. If an Intellectual Property Rights agreement is required, it is the responsibility of the academic supervisor to determine this.

45. The University requires that Faculties maintain an up to date register of staff who are qualified to engage in research supervision from information provided by the Head of School/Institute and this is maintained by the relevant Graduate School Administrator.

46. The University requires that there are regular structured interactions made available to the student to meet with at least one member of the supervisory team at least ten times per year, approximately monthly, with no more than an eight week gap between meetings. The University requires that at least three of these meetings each year should include the full supervisory team to report, discuss, and agree academic and personal progress (for full-time students). In cases where the student is not able to meet these requirements for any reason, the supervisory team should agree an equivalent schedule of contacts with the student, using for example E-mail and videoconferencing. For part-time students or those studying their programme by distance learning, regular structured interactions should be on a pro-rata basis. Students who are registered as ‘pending submission’, ‘extended submission’ and ‘under examination’ should expect to receive normal supervision. The University requires that the formal interactions outlined above, between student and supervisor, are recorded and the outcomes confirmed, in the student’s ePortfolio.

47. The University requires that students who are Tier 4 visa holders should continue to record and confirm the outcomes of their regular supervisory meetings, via ePortfolio, while under examination through to completion of their studies, as a condition of their visa sponsorship. These meeting records and outcomes may be requested by the Home Office as part of the University’s sponsorship duties.

48. The University requires that the maximum period of absence for any member of the supervisory team should not exceed three months, following which appropriate alternative arrangements should be made by the School/Institute and reported to the Graduate School Administrator to ensure continuity of supervision.

49. In order to ensure that individual supervisors are not overloaded, the University requires appropriate limits on the numbers of research students who may be supervised by an individual supervisor, subject to a normal maximum of six full-time equivalent students. Where Heads of Schools/Institutes allow supervisors to take responsibility for more than six full-time equivalent students, the University requires them to make arrangements to ensure that there will be adequate contact between student and supervisor and that the latter is not overburdened. The Head of School/Institute is responsible for ensuring that the overall workload of supervisory staff, including secondary supervisions, is at a level that will allow supervisors to deliver the relevant aspects of the Code of Practice for their students.
50. The University requires that the supervisory performance of individual staff is reviewed annually as part of performance development and review.

51. The University requires that all students have access to confidential advice and support from a nominated contact outside the supervisory team. It requires that Faculties should designate such contacts, which should include the Faculty Postgraduate Tutor and others at School/Institute and/or programme level as appropriate, and make this information available to students. The relevant Graduate School Administrator is also available to provide advice and guidance to students.

52. It also requires that all supervisors have access to confidential advice and support from a nominated contact, particularly where they have concerns about a student’s ability or application to the programme. It requires that Schools/Institutes should designate such a contact, who would normally be the Director of Postgraduate Studies, or equivalent, and make this information available to supervisors.

53. Declaration of personal interest: all members of staff are required to declare any personal relationships with any student they are asked to supervise, or are already supervising. A supervisor who declares such a personal relationship prior to appointment as supervisor for the student in question shall not be permitted to undertake supervision of that student. A supervisor who declares such a relationship after having been appointed as a member of the supervisory team for the student in question, subject to the permission of the Dean of Postgraduate Studies, may continue, but shall not be responsible for, or be involved in, any reports affecting the student’s progress and/or assessment.

54. The University requires that all research supervisors adhere to this Code of Practice. Where a supervisor does not adhere to this Code of Practice, the Dean of Postgraduate Studies in consultation with the Head of School/Institute has the power to remove the member of staff from the list of approved research supervisors and make alternative arrangements for the supervision of the student. Where the Dean of Postgraduate Studies and Head of School/Institute are unable to resolve the supervision the PVC of the Faculty will be consulted on the matter.

**Support for Research Students**

55. A thesis demonstrates the ability of a student to undertake original research. It follows that written documents produced as part of a PhD (or other doctoral degree) or MPhil must solely be the student’s own work. Candidates are examined in the oral examination to demonstrate that the research has been carried out by them; test their ability to defend their thesis, and establish whether the candidate has satisfactory knowledge of the wider field in which the research is placed. It is crucial that the research must be an intellectual project that is conducted and owned by the student, and where the theoretical perspective, methodological approach, interpretation of the data generated and the conclusions drawn are all those of the student.

56. Given these considerations it is important that students are aware of the degree of support that is acceptable when conducting research. This guidance outlines good professional practice during the conduct of research and indicates the support that students can expect from their supervisor. Where a student contravenes this guidance it
may be considered an assessment irregularity: see the Assessment Irregularities Procedure at: http://www.ncl.ac.uk/students/progress/Regulations/SPS/assessment.htm

Supervisory Support
57. The Guidelines on Good Practice in Research Supervision and the Guidelines for Research Students and Research Supervisors (Handbook for Research Students and Research Supervisors (part three)) cover in detail the relationship between the student and supervisor. Over the course of the research the relationship between the student and their supervisor will change. In the early stages of the research the supervisor will induct the student into the research field and acquaint them with the research conducted within it. As the research progresses the student will gradually develop greater independence and by the final stages of the research they will be able to operate as an independent researcher capable of actively engaging in their field. In general terms, supervisory support can include:

- Assistance with the choice of topic;
- Critical and constructive feedback on the work produced;
- Advice on the sources or literature used;
- Guidance on the methodology or techniques used and the approach to data collection;
- Discussion of evidence and results;
- Reading drafts and commenting on issues of substance.

Supervisors will not:

- Undertake the actual research itself;
- Write or significantly redraft papers or chapters;
- Conduct a detailed proof read of the thesis.

Changes to Supervisory Teams
58. Occasionally it may be necessary to make changes to supervisory teams where, for example, the academic focus of the PhD has altered, where supervisory responsibilities have changed, or where members of the supervisory team have left the employment of the University. If this is the result of a temporary absence of a member of staff, other members of the supervisory team will continue the supervision with responsibilities being adjusted accordingly. Where the members of the supervisory team are permanently changed, research students should normally be consulted in advance. The University will take all reasonable steps to replace supervisors with suitable alternatives and may extraordinarily include arrangements for supervisors to be from a different academic unit or even from outside the University. However, particularly where it is the student’s choice to effect a change in their project or supervisory staff, it may not always be possible to provide suitable alternatives due to the specialist nature of doctoral study.

59. On rare occasions, supervisory relations may break down. In such circumstances, in the first instance, students should consult with another member of the supervisory team. If it is not possible to resolve the problems in this manner, the student and/or a member of the supervisory team should report difficulties to the Head of School/Institute or their nominee, such as the Director of Postgraduate Study. They may refer the matter, if
necessary, to the relevant Graduate School Administrator or Dean of Postgraduate Studies for advice and mediation. However, students may consult directly with the Graduate School Administrator or Dean of Postgraduate Studies in confidence. Where possible, prompt action should be taken to resolve the conflict, and where necessary, a student or a supervisor may request a change of supervisor from the Head of School/Institute or nominee. In making any changes to the supervisory team, due consideration must be given to the need to provide supervisory expertise that is appropriate to the project, in line with the Code of Practice.

60. All supervisory changes must be notified to the relevant Graduate School Administrator and be approved by the Dean of Postgraduate Studies.

Third Parties
61. This guidance applies where a third party such as a professional copy editor or a proof reading company has been employed to provide assistance, or where students receive help from other parties such as fellow students. Where a professional third party has been employed to assist the student, this should be made clear on the PhD itself and a statement included indicating the nature of the contribution and by whom.

62. A third party may provide:
- Assistance with spelling, punctuation and grammar, and
- Improve the format or layout of the work including editing sentences and paragraphs.

63. Third parties must not make significant adjustments to the work, and this includes:
- Changing, clarifying or developing the argument of the thesis;
- Adding to the references used;
- Correcting factual information;
- Translating significant amounts of work that are integral to the thesis;
- Significantly reducing the length or substantially altering the organisation of the thesis.

The Development and Approval of Research Project Proposals
64. Research project proposals may be developed prior to the recruitment of a student for purposes of obtaining funding or subsequently by the student following registration or the successful completion of the taught part of the programme.

65. Project proposals must be approved by an independent School/Institute Panel and Head of School/Institute, before being submitted for approval by the relevant Dean of Postgraduate Studies. All students should submit project proposals on ePortfolio within three months of starting the programme, even where a student’s project proposal has already been reviewed and approved by external peer review.

66. Where the research proposal is developed following registration, the University requires that the supervisory team supports the student in the development of the research project proposal. In particular, the team needs to ensure that the project is achievable within the time-scale of the programme, and to confirm that sufficient resources will be available to support it. The University requires that all research project
proposals are approved by an independent School/Institute panel. It requires that the panel should consist of at least two independent University members of academic staff (one of which can be an Honorary members of staff) with relevant skills and knowledge, at least one of whom should be demonstrably research-active and at least one of whom should have experience of successful supervision.

67. The University requires the panel to evaluate research proposals against the criteria:

- that the project has clear aims and objectives;
- that the student has (or can acquire) the knowledge, skills, and aptitudes to complete the project successfully;
- that the proposed supervisory team has, or will be able to acquire, the skills, knowledge and aptitudes necessary to supervise the project to a successful conclusion;
- that the project is suitable for the programme of study and for the award;
- that it can be completed within the time-scale for the programme;
- that sufficient resources will be available to complete the project;
- whether ethical approval is required;
- in cases where the project involves extended absence from the University on fieldwork or work in collaborating organisations, that appropriate arrangements will be made to support and monitor the progress of the student.

68. In order to evaluate these matters, the panel will need evidence in the forms of:

- a research proposal;
- a research plan;
- a supporting statement by the supervisory team.

69. The panel should consider the evidence and make a written report on the proposals, which should be made available to the student and to the supervisory team once their recommendation has been confirmed by the Dean of Postgraduate Studies. In the event of concerns, the report should indicate the steps necessary to address them. The University requires that Faculties should establish maximum times for the re-submission of proposals, not exceeding three months.

70. When the panel is satisfied on the above matters, it then recommends the research project for approval to the Head of School /Institute or nominee and the Dean of Postgraduate Studies. The research project and the supervisory arrangements are then reported to the Graduate School Administrator.

71. If the panel does not approve the research project and/or the supervisory arrangements following reassessment of the project approval it will be the annual Progress Panel that will be required to consider the situation in full and recommend on the outcome for the student.

**Progression and Monitoring**

72. The University requires that supervisory teams should formally monitor the progress of students on research programmes through annual reports to the Progress Panel, on ePortfolio. Where appropriate, reports on progress should be made to sponsors and copied
to the Graduate School Administrator.

73. However, if, at any point during the course of the programme, the supervisory team have concerns about progress, they should inform the student in writing prior to a meeting. At the meeting, the written comments of the team, including any additional work that the supervisors feel are required, should be discussed with the student, and be agreed along with a review date. If progress continues to be unsatisfactory, the student should be informed in writing that this will be referred to the Progress Panel for consideration. The letter should be copied to the Graduate School Administrator.

74. The University requires that the progress of the student should be formally reviewed annually by the same (or equivalent) panel that approved the research project and the supervisory arrangements. Such reviews are completed in ePortfolio and involve a written progress report by both the student and supervisory team and possibly include one or more of the following, as specified by their School/Institute;

- submission of a piece of work;
- a presentation on their research
- undergo a viva or interview
- evidence of research training

75. Panels should consider the evidence, including annual reports by supervisory teams, and determine whether progress indicates that the research project will meet the standards for the award.

76. If this criterion is met, the panel should recommend that he or she should have their conditional candidature confirmed at the end of the first year, or that their registration should be continued.

77. If this criterion is not met, the panel should indicate what the student and, where appropriate, the supervisory team must do to put the research project back on track. It should set a date for further review within a period prescribed by the Faculty, normally within two months (four months for part-time students).

78. Panels should complete a written report on ePortfolio to be approved by the Dean of Postgraduate Studies, which will then be shared with the research student and the supervisory team, on ePortfolio. In the event of the panel being unable to make a recommendation to progress, the student and the supervisory team should determine an action plan to ensure that the research project will meet the standards of the award by the date set for further review.

79. If necessary, the panel should reconvene on the date set and consider whether progress has been such that the research project will meet the standards for the award. Where the evidence has demonstrated this, the panel should recommend confirmation of candidature or continuation as appropriate.

80. Where the evidence does not demonstrate that the research project will meet the standards for the award, the panel’s recommendations will depend upon its judgement of the reasons in terms of the potential of the student to achieve the standards and the adequacy and appropriateness of supervisory arrangements. Any reassessment should be
recorded in ePortfolio.

81. Where the panel is not satisfied that supervisory arrangements are adequate and appropriate, but considers that the student would otherwise be able to achieve the standards of the award, it may seek the approval of the Head of School/Institute to make a recommendation to the Dean of Postgraduate Studies for the replacement of all or part of the supervisory team.

82. Where it is satisfied that supervisory arrangements are adequate and appropriate but that the student is unlikely to be able to achieve the standards for the award, it may recommend that the student be registered for a lower degree where he or she is likely to be able to achieve the standards or, if students cannot meet the standards for those awards, that their registration be terminated.

83. Although the final decision with respect to any recommendation made by the School/Institute is taken by the Dean of Postgraduate Studies, a School/Institute may give provisional feedback to the students after the annual Progress Panel have met.

Appointment of Examiners

84. The regulations of the University require that all research degrees are examined by two examiners, at least one of whom must be external. For staff candidates, the examination shall normally be conducted by two external examiners for each candidate although for junior members of staff, at the discretion of the Dean of Postgraduate Studies, one external and one internal may be appointed.

85. All Examiners should be willing to complete the process of examination normally within ten weeks of submission of the thesis.

86. In nominating Examiners, Heads of School/Institute should, in consultation with supervisors, take account of points 87 to 92.

External Examiners

87. External Examiners are a recognised authority in their field and provide an important external oversight of the examination process. It is recommended that external examiners should normally be appointed from research-intensive universities, to ensure standards and consistency across all Faculties.

External Examiners MUST:
- Have significant experience and knowledge of research in the subject area within which the candidate is working.
- Be independent and have no obvious conflict of interest.
- Have a research degree or equivalent academic or professional experience.
- Be research active and will normally have published in recognised outlets in the discipline in the last two years.
- Have a clear understanding of the examination process normally based on experience of examining doctoral degrees at other institutions.

External Examiners MUST NOT:
- Be a former member of Newcastle University or a former postgraduate unless more than five years have elapsed since that person left the University.
• Be appointed on a regular basis such that their familiarity with the School/Institute might influence their judgment.
• Have a close relationship with the postgraduate student or supervisory team e.g. have published with or worked directly with them to a significant degree within the last five years.
• Be an honorary member of Newcastle University.
• Normally be a retired member of staff from another University unless they demonstrably meet all the criteria outlined above.

Internal Examiners
88. The Internal Examiner is normally responsible for ensuring that the University’s examination practices are followed and that the Joint Report Form is forwarded to the Graduate School Administrator.

To be eligible, Internal Examiners MUST:
• Have a contract of employment at Newcastle University and be registered on the approved list of supervisors held by the Faculty.
• Have expertise in the broad field of the thesis under examination.
• Be familiar with the University procedures for the examination of doctoral degrees (where examiners have not conducted an examination at Newcastle they must be briefed by the School/Institute and an Independent Chair must be appointed – see below).

Internal Examiners MUST NOT:
• Have had any direct involvement with the research project under examination.
• Be members of the supervisory team that have supported the work of the student.
• Be a postgraduate student.
• Be a visiting member of Newcastle University.

An Independent Chair
89. An Independent Chair makes sure the University’s procedures with regard to the examination of research degrees are followed. They take no part in the assessment process, but ensure that the examination process is conducted fairly and equitably. Graduate School Administrators maintain a list of approved Independent Chairs who can be appointed by Deans of Postgraduate Study, when required.

90. The Independent Chair will be present for the duration of the oral examination, normally also including the pre-meeting and post oral discussions between examiners. An Independent Chair will not be required to take notes of the meeting for the external examiners, but will be required to provide a summary report on proceedings to the Graduate School Administrator following the oral examination.

An Independent Chair MUST be appointed in the following circumstances:
• Where two External Examiners are appointed.
• Where the Internal examiner has no previous experience of examining a doctoral degree.
An Independent Chair MAY be appointed in the following circumstances:

- Where the Examiners of the thesis require the assistance of an independent authority to conduct the examination process.
- Where the Internal examiner has no previous experience of examining doctoral degrees at Newcastle University.
- When the Dean of Postgraduate Studies deems an independent authority is needed to ensure the examination process is conducted fairly.

An Independent Chair shall:

- Normally be an academic member of staff at the University, normally at Senior Lecturer / Reader level or above.
- Be familiar with Newcastle University examination processes for research degrees.
- Have substantial experience of postgraduate research and examination.

An Independent Chair MUST NOT:

- Be a member of the supervisory team, or have played any part in the research under examination.
- Normally be from the student and/or supervisor’s home School/Institute.

**Responsibilities and Conflicts of Interest**

91. It is the responsibility of the proposed External or Internal Examiners to declare if they have a conflict of interest such as a personal or professional relationship with the student, supervisor or alternative Examiner. Once the Examiners have been appointed it is the responsibility of the supervisory team to communicate to the Graduate School Administrator any health or personal circumstances that may affect the conduct of the oral examination. The supervisors have no further involvement in the examination process once the examiners have been appointed other than to ensure that the administrative arrangements for the oral examination are in place.

92. It is the role of the Dean of Postgraduate Studies to comment critically on the proposed Examiners and if there is a perceived conflict of interests, the Dean of Postgraduate Studies has the final decision in the appointment of Examiners.

**Personal Extenuating Circumstances**

93. The University has established procedures for dealing with personal extenuating circumstances affecting research students throughout the duration of their studies. A research student can apply for an interruption of studies, a change of candidature or an extension to their submission deadline, if personal circumstances are impacting on their studies.

94. Following submission of a thesis, if a candidate is aware of any circumstances that may stop them from attending the oral examination, these should be brought to the attention of their Supervisor and the Graduate School Administrator, to determine if it is necessary to delay the oral examination.

95. A candidate should also contact their Supervisor and the Graduate School Administrator, if there are personal circumstances they believe could impact on their performance at the oral examination. This information will then be provided to the
examiners, in advance of the oral examination, to determine if any reasonable adjustments are required.

96. Irrespective of personal circumstances, examiners will be expected to assess the candidate against the assessment criteria for the relevant research degree. However, examiners might wish to take personal circumstances into account when considering the recommendations open to them.

97. By attending an oral examination, a candidate is declaring that they are fit to attend the examination, and as such, it is unlikely that a student would be able to submit a later claim that their performance was affected by personal circumstances.

Examination

98. The University requires that Heads of Schools/Institutes should be responsible for the nomination of examiners for research degrees, in accordance with the criteria for appointment set out above. Heads of Schools/Institutes should consult the supervisory team about possible nominees, and the supervisory team should offer the student the chance to comment.

99. Nominations should be made to the Dean of Postgraduate Studies, on ePortfolio, who should check that the examiners meet the requirements set out above and, if so, approve them on behalf of Senate.

100. Once nominations have been approved, the Graduate School Administrator will send a letter of appointment along with relevant information including the University’s Handbook for Examiners of Research Degrees with institutional assessment criteria for the award.

101. Where an Independent Chair is required, the Graduate School Administrator will consult the list of approved Independent Chairs and provide details of the Independent Chair to the examiners, supervisors and candidate.

102. The supervisor should agree in writing the date, time and place with the examiners, candidate and where appropriate the Independent Chair and should then notify the Graduate School Administrator. Candidates should be asked whether or not they wish to have a supervisor present in the oral examination as a non-contributing observer (unless asked to contribute by the Chair). If not present, the academic supervisor should be available for consultation.

103. Under no circumstances should the arrangements for the oral examination be delegated to the candidate. There should also normally be no direct contact between the candidate and the examiners prior to and following the oral examination.

104. The University requires the supervisory team to advise the candidate on preparation for the oral examination and where practical to offer at least one practice session.

105. The University requires that, prior to the oral examination, examiners make preliminary written independent reports on the thesis, which should be sent to the Graduate School Administrator.

106. The University requires that Examiners should not consult with each other before
both independent preliminary reports have been submitted to the Graduate School
Administrator, normally two weeks in advance of the oral examination.

107. The University requires that oral examinations should be chaired by the external
examiner and conducted in accordance with the procedures set out in the Handbook for
Examiners of Research Degrees. In an oral examination where an Independent Chair is
appointed, it will be the Independent Chair who will chair the oral examination.

108. Following the oral examination the University requires that examiners write a joint
report (except in cases where they disagree when they should write separate reports) and
make an appropriate recommendation in respect of the award. Where the
recommendation is re-submission, the report should include a statement of the work to be
done to achieve the award within the period allowed under the University’s regulations.

109. As well as reporting on the thesis and the candidate, examiners should be requested
to provide comments on the broader issues of the research training skills and the research
environment.

110. The examiners’ joint report should be sent to the Graduate School Administrator for
approval by the Dean of Postgraduate Studies. The Graduate School Administrator will
send copies of the final report, along with the statement of any required
corrections/ revisions, to the student, supervisory team and the Head of School/Institute
(or nominee).

Criteria for the Doctorate

111. Doctoral degrees at Newcastle University meet in full the doctoral qualification
descriptor contained in The Framework for Higher Education Qualifications in England,
Wales and Northern Ireland (2008), and are aligned with the Framework for Qualifications
of the European Higher Education Area:

http://www.qaa.ac.uk/assuringstandardsandquality/qualifications/Pages/default.aspx

Doctoral degrees are awarded to candidates who demonstrate:

- The ability to create and interpret new knowledge through original research and
  advanced scholarship;
- A systematic understanding of an existing body of knowledge that is at the forefront
  of an academic field;
- The ability to explore critically, evaluate and test their ideas, and those of others, and
to relate them to a wider body of knowledge;
- A good understanding of the research techniques, methods or approaches adopted
  and applied in a field of enquiry;
- The ability to conceive and implement a project which demonstrates an
  understanding of how to conduct research at the forefront of a field;
- An ability to produce research material worthy of publication.

Criteria for the MPhil Programme

112. The Degree of Master of Philosophy (MPhil) is awarded to candidates displaying
convincing evidence of the capacity to pursue research and scholarship and represent
original work. On successful completion of an MPhil candidates will have attained Level 7,

For the award of an MPhil degree the University requires:
- A systematic understanding of knowledge that is informed by work at the forefront of an academic field;
- An ability to evaluate and critically appraise current research and advanced scholarship, and some evidence of originality in the application of this work;
- An understanding and critical appreciation of the research techniques, methods or approaches adopted and applied in a field of enquiry;
- An ability to conceive and implement a research project, which demonstrates an understanding of how to conduct research in a field.

113. Normally an MPhil thesis will be more focused or limited in scope than a doctoral degree. A doctoral degree will demonstrate greater depth of critical enquiry than the MPhil. Relative to the doctoral degree, the MPhil will have less emphasis on original work and it need not be worthy of publication.

All Research Degrees

114. For all research degrees, the University requires that work presented for examination should be:

115. Authentic: The submission should be the candidate’s own work and not be plagiarised from the work of others, published or unpublished. All sources used should be appropriately acknowledged using a recognised form of referencing.

116. Scholarly: The thesis should conform to the normal canons of scholarship, studying a topic in-depth, and displaying critical discrimination and a sense of proportion in evaluating evidence and the opinion of others. Sources should be cited accurately, consistently, and correctly in the text and in the bibliography.

117. Professional: The thesis should demonstrate the author has acquired the skills of a professional researcher capable of conducting research in accordance with the ethical practices of their field, and that they possess a good understanding of their role in the wider research process. The author should also demonstrate the ability to exercise personal responsibility and initiative in complex and unpredictable professional research environments.

118. Well-structured, written, and presented: The thesis should demonstrate skill in writing and presenting research similar to scholarly work in their field. It should be clearly structured and orderly in arrangement, and well-written and presented. Similarly, any composition, exhibition, artefact(s) or other products of practice arising from the research should be arranged and presented in an orderly and coherent way.

Quality Assurance and Enhancement Framework

119. All research programmes are reviewed under the Quality Assurance and Enhancement Framework, which provides an opportunity to reflect on current practice in relation to Research Degree Programmes and provides a forum to consider the enhancement of the student experience through the sharing of good practice and feedback from external
sources and students.

120. The process is carried out in two ways; firstly, an Annual Review of Research Degree Programmes is undertaken, which provides Schools/Institutes with a formal opportunity to monitor the effectiveness of research degree provision focusing on aspects of this Code of Practice.

121. The Annual Review reports are supplemented by a Review Visit; within each Faculty two visits to Schools/Institutes take place per year. The review visits are undertaken by a small panel who explore in more detail the evidence provided by the annual review process to evaluate its efficacy, ask questions of the School/Institute under review and meet students.

122. The results of the Review and the Review Visits are reported annually by Graduate School Committees to the Postgraduate Research Sub-Committee of the University Learning, Teaching and Student Experience Committee.

123. The Framework is applicable to all elements of research programmes, including any taught components. Full details of the policy and process are available at http://www.ncl.ac.uk/ltds/governance/monitoring/researchdegree/.

**Feedback Mechanisms**

124. The University requires that confidential mechanisms are established for research students to feedback on the quality of their learning experiences. Such mechanisms should include: questionnaires focused on recruitment, admission and induction procedures; questionnaire evaluations of the research skills training programme; survey questionnaires, focus groups or interviews covering the totality of the learning experience.

125. Any feedback received from other stakeholders, including supervisory teams, review panels, examiners, funders, collaborative organisations, employers and alumni should also be reviewed.

126. Feedback from these should be considered by Graduate School Committees and, where appropriate, acted upon.

**Complaints and Resolution**

127. The University has established procedures for complaints about a service, member of staff, or another student. A complaint may be made by any student, including a research student. Details are set out in the Complaints and Resolution Procedure available at: http://www.ncl.ac.uk/students/progress/Regulations/SPS/complaints.htm

128. The University provides a clear three-stage procedure for students to complain about the level of service or treatment which may have fallen short of what might reasonably be expected. At Level 1 (informal stage for resolution), complainants are expected to make every effort to resolve informally a problem with the individual(s) concerned or to seek help/advice in writing from the complainant’s tutor/supervisor/Head of School, or appropriate Head of Service.

129. Only when the steps taken under Level 1 of the procedure have failed, or when the complainant considers that their complaint has not been resolved may Level 2 of the
procedure be invoked by submission of the Complaints Form, together with full details of the complaint and any supporting evidence.

130. Level 3 is the formal review of the Level 2 outcome, where the complainant requests a review of the outcome of their complaint at the Level 2 stage.

**Academic Appeals and Query**

131. The University has established procedures for appeal against a recommendation by a progression panel and examiners of research degrees. Details are set out in the Academic Appeals and Query procedure available at:

http://www.ncl.ac.uk/students/progress/Regulations/SPS/appeals.htm.

132. The University provides a clear three-stage procedure for students making Academic Queries and Appeals requesting reconsideration of Board of Examiners/Personal Extenuating Circumstances (PEC) and/or Degree Programme Director (DPD) / Progress Decisions.

133. Level 1 is the informal stage for querying academic decisions. Appellants are expected to make every effort to raise their assessment/progress query, in writing, with the School/Faculty directly concerned in the first instance. Graduate School Administrators are the nominated contact for Research Degree programmes/students at Level 1.

134. Only when the steps taken under Level 1 of the procedure have failed, or when the Appellant considers that their query has not been resolved, may Level 2 of the Academic Queries & Appeals Procedure be invoked by submission of the Academic Appeal Form together with full details of the formal appeal and any supporting evidence.

135. Level 3 is the formal review of the Level 2 outcome, where the Appellant requests a review of the outcome of their academic appeal at the Level 2 stage.

---

**ADDENDUM TO THE CODE OF PRACTICE FOR RESEARCH MASTERS’ DEGREE PROGRAMMES**

**Introduction**

i. The purpose of this Addendum to the Code of Practice is to set out the University’s standards for its research masters’ programmes. This refers in particular to MLitt, MRes, as well as some MMus and LLM programmes

ii. This addendum to the Code of Practice is supplementary to aid staff in interpretation for the University’s research masters’ programmes and should be read in conjunction with the full Code of Practice for Research Degree Programmes.

**Selection of Research Students**

iii. The University requires that there should be rigorous selection policies and procedures for Postgraduate Admissions and, where appropriate, School/Institute or subject levels.

iv. The University requires that selection procedures should be rigorous and involve the following;
• involve at least the Degree Programme Director or PGR Director in the selection process, who will act on behalf of the Head of School /Institute to approve the offer of a place.
• interviewing applicants, where it is deemed appropriate and possible.
• taking up two references and, if one or more of these is not available at the time of offer, making the latter conditional upon the receipt of satisfactory references.

Learning Agreements

v. Students need to have received, understood, and accepted the expectations of their research programme. This should be set out in a formal Learning Agreement, which should be signed by the student and by the Supervisor or Degree Programme Director on behalf of the University.

The Development of Relevant Knowledge and Skills

vi. The University requires the research programme should offer students the opportunity to develop a relevant range of research knowledge and skills, appropriate to the programme.

Research Students

vii. It is required that research students maintain regular attendance on the programme. During the research project/dissertation stage full-time students should undertake regular structured interaction and meet with their allocated supervisor at least monthly. The University requires that research students should record and confirm the outcomes of meetings, normally on ePortfolio.

Supervisory Arrangements

viii. The University requires that individual supervisors are appointed for the research project/dissertation element of the programme. This should normally be undertaken by a member of academic staff, who should be demonstrably research active and on the approved research supervisors’ list for the school/institute or faculty. Students should always have a second named person acting as advisor, either an additional disciplinary expert or the Degree Programme Director or School Director of Postgraduate Studies.

The Development and Approval of Research Project Proposals

ix. Research project/dissertation proposals should be developed prior to the commencement of the research element of the programme and approved by the Degree Programme Director or PGR Director in conjunction with the research supervisor.

x. The University requires the Degree Programme Director to evaluate research proposals against the criteria;

• that the project has clear aims and objectives;
• that the student has (or can acquire) the knowledge, skills, and aptitudes to complete the project successfully;
• that the proposed supervisor has, or will be able to acquire, the skills, knowledge and aptitudes necessary to supervise the project to a successful conclusion;
• that the project is suitable for the programme of study and for the award;
• that it can be completed within the time-scale for the programme;
• that sufficient resources will be available to complete the project.

Progression and Monitoring

xi. The University requires that the Degree Programme Director or PGR Director and supervisor should formally monitor the progress of students on research masters’ programmes. Formal monitoring will include review of progress following any taught components of the programme.

xii. However if, at any point during the course of the programme, the Degree Programme Director, PGR Director or supervisor has concerns about progress, they should inform the student in writing prior to a meeting. At the meeting, the written comments of the team should be discussed with the student, and a plan of action should be agreed along with a review date. If progress continues to be unsatisfactory, the student should be informed in writing of the reasons and of the possible consequences in terms of being unable to progress, suspension, or termination of registration. The letter should be copied to the Graduate School Administrator.

xiii. The University requires that the progress of the student should be formally reviewed after the taught element of the programme.

Examination

xiv. The regulations of the University require that all research degree projects/dissertations are examined by two examiners, one internal and one external. For staff candidates, the examination shall normally be conducted by two external examiners for each candidate although for junior members of staff, at the discretion of the Dean of Postgraduate Studies, one external and one internal may be appointed.

xv. The University requires that examiners should be demonstrably research-active in relevant fields. Examiners should be independent of the project and otherwise meet the criteria set out in the criteria for appointment of examiners set out for doctoral degrees above. Supervisors are explicitly excluded from acting as examiners for the research project/dissertation.

xvi. The University requires that the Head of School or Degree Programme Director should be responsible for the nomination of examiners for the research project/dissertation.

xvii. Nominations of examiners should be made on ePortfolio, to the relevant Dean of Postgraduate Studies, who should check that the examiners meet the requirements set out above and, if so, approve them on behalf of Senate.

xviii. Once nominations have been approved, examiners should be sent a letter of appointment and relevant information including assessment criteria for the award and profile of marks from the modules studied prior to the research project/dissertation.
xix. Following assessment of the research project/dissertation the examiners should write separate reports and make an appropriate recommendation in respect of the award. Where the recommendation is re-submission, the report should include a statement of the work to be done to achieve the award within the period allowed under the University’s regulations.

xx. If the examiners determine that an oral examination is required, this should be chaired by an external examiner and conducted in accordance with the procedures set out in the Handbook for Examiners of Research Degrees.
PART THREE - ACADEMIC MATTERS – RESEARCH GUIDELINES

Postgraduate Research ePortfolio (https://portfolio.ncl.ac.uk/)

Research degrees are highly regarded by employers and academics. The essential purpose of a research programme is a period of training in research and the generation of an original piece of work. During your studies, you will develop a range of personal and professional skills. These skills will prove invaluable for the transition onto your next career.

The purpose of the Postgraduate Research ePortfolio is to provide a record of your personal development at Newcastle University. The portfolio is designed to assist you to get the most from your postgraduate experience, helping you to plan and reflect upon your research and how it will relate to future aspirations. It will help you to identify areas of strength and those areas you feel need more attention. By completing your portfolio, you will be able to build on the learning and results you achieve, which will provide an ongoing record that can contribute towards your personal growth and career planning. The portfolio is intended to help you understand how your learning can be applied to a wide range of subjects and activities. It will help to improve your research and generic skills and identify opportunities for personal development.

Your portfolio will include relevant information on the following:

- Research Programme
- Personal Development Plan (PDP)

This portfolio is a means of planning/developing and recording both research and generic skills and should be viewed as an important tool for your Continuing Professional Development (CPD). You will be responsible for the generation and maintenance of your portfolio, for which you will be expected to show commitment, planning, action and evaluation/reflection.

1. Why keep a portfolio?

The introduction of personal development portfolios for CPD has had a positive effect on research performance and all members of staff and students are encouraged to maintain one, primarily because it allows individuals to be 'in charge' of their own development. The portfolio will also:

- Provide a record of your personal and academic development
- Record the acquisition of skills and self-development, which will be useful for CV preparation
- Help you to understand and learn from 'life' experiences and how these can contribute towards your future prospects by providing examples of skill developments
- Allow opportunities for reflection and self-evaluation on your progress and future needs
- Introduce the concept of continuous professional development
- Help you to demonstrate and be aware of that 'something extra' which future employers value
PART THREE - ACADEMIC MATTERS – RESEARCH GUIDELINES

Postgraduate Research ePortfolio (https://portfolio.ncl.ac.uk/)

Research degrees are highly regarded by employers and academics. The essential purpose of a research programme is a period of training in research and the generation of an original piece of work. During your studies, you will develop a range of personal and professional skills. These skills will prove invaluable for the transition onto your next career.

The purpose of the Postgraduate Research ePortfolio is to provide a record of your personal development at Newcastle University. The portfolio is designed to assist you to get the most from your postgraduate experience, helping you to plan and reflect upon your research and how it will relate to future aspirations. It will help you to identify areas of strength and those areas you feel need more attention. By completing your portfolio, you will be able to build on the learning and results you achieve, which will provide an ongoing record that can contribute towards your personal growth and career planning. The portfolio is intended to help you understand how your learning can be applied to a wide range of subjects and activities. It will help to improve your research and generic skills and identify opportunities for personal development.

Your portfolio will include relevant information on the following;

- Research Programme
- Personal Development Plan (PDP)

This portfolio is a means of planning/developing and recording both research and generic skills and should be viewed as an important tool for your Continuing Professional Development (CPD). You will be responsible for the generation and maintenance of your portfolio, for which you will be expected to show commitment, planning, action and evaluation/reflection.

1. Why keep a portfolio?

The introduction of personal development portfolios for CPD has had a positive effect on research performance and all members of staff and students are encouraged to maintain one, primarily because it allows individuals to be ‘in charge’ of their own development. The portfolio will also:

- Provide a record of your personal and academic development
- Record the acquisition of skills and self-development, which will be useful for CV preparation
- Help you to understand and learn from ‘life’ experiences and how these can contribute towards your future prospects by providing examples of skill developments
- Allow opportunities for reflection and self-evaluation on your progress and future needs
- Introduce the concept of continuous professional development
- Help you to demonstrate and be aware of that ‘something extra’ which future employers value
2. **Personal Development Plan (PDP)**

The Learning and Teaching Support Network defines personal development planning (PDP) as ‘a structured and supported process undertaken by an individual to reflect upon their own learning, performance and/or achievement and to plan for their personal, educational and career development’.

The PDP will help to highlight areas of strengths and areas for improvement by mapping your current skills against the Researcher Development Framework (RDF) developed by Vitae: [https://www.vitae.ac.uk/researchers-professional-development/about-the-vitae-researcher-development-framework-planner](https://www.vitae.ac.uk/researchers-professional-development/about-the-vitae-researcher-development-framework-planner)

This can be achieved by completing the self-assessment audit on ePortfolio and development needs agreed in conjunction with your supervisory team. The Annual Progress Review Assessors will want to see evidence that this has been done.

Each student is responsible for their own Research Training ePortfolio and should ensure it is up-to-date. The portfolio should include a description of the skills developed and the corresponding skill/technique within the Researcher Development Framework. Records can be kept in the form of a diary, learning log, journal or whichever means is most convenient. The professional standard for recording your skills development is set out on ePortfolio. The following is a list of ‘essentials’ that should be recorded in your ePortfolio:

- Lab meetings, seminars, conferences attended (including questions asked). *N.B. Postgraduate researchers are required to contribute to the research environment by attending appropriate internal and external events.*
- Training courses attended including faculty training courses (IT, library, safety, etc.)
- Abstracts presented at local, national and international meetings with other relevant information (poster, oral presentation, presenting author etc). *N.B. You are required to give at least one formal presentation per year on your work.*
- Publications, including manuscripts in press and abstracts where published.
- Work experience and other information relevant to your future career (teaching/demonstrating, work placements with industry/business etc, time spent within other academic institutions.)

### 2.1 What Skills?

The following is a summary of the skills defined by the Researcher Development Framework, that you are expected to develop over your research degree. Some of the skills areas will overlap:

The RDF descriptors are structured in four domains and twelve sub-domains which encompass what researchers need to be effective in their approach to research, when working with others and in contributing to the wider society and environment:

A: Knowledge and Intellectual Abilities
B: Personal effectiveness
C: Research Governance and Organisation
D: Engagement, influence and Impact
In conjunction with the skills above, the University encourages you to: develop relevant academic networks, attend seminars and conferences, present papers, publish papers, support your own career development, and contribute to your research environment by attending appropriate internal and external events.

2.2 Creating a PDP

To create a PDP, you will need to assess your skills abilities, following this identify your specific needs/ skills gaps and then decide what form of training can be used to meet these needs. Training can be both formal (courses/ workshops) and informal (supervisors / research colleagues) and can include aspects of your research i.e. attending seminars, conferences etc. At appropriate stages during your studies, you will be expected to audit your skills and update your PDP. Your RTP should be continually updated with information on seminars attended etc. By setting goals and targets in your PDP it can keep you focussed on developing your skills. Continual reviewing and reflection will help you to determine whether you are effectively meeting these goals when used in the RTP process.

1. **Identify goals** – Completing your research degree and meeting the training requirements of the Researcher Development Framework.
2. **Determine the skills required** - Assess your skills according to statements in APPENDIX E and note areas where you need to develop or learn a new skill/ technique
3. **Plan to achieve development goals** - Set targets for your development and seek opportunities to develop your skills (create a PDP)
4. **Record Training** - Build a record of your skills achievement and skills profile
5. **Evaluate and Review** – At each stage of your research determine whether you are
making progress towards your goals and re-evaluate your skills

2.3 Timescales: When to use your RTP
Your role is to reflect on and evaluate your progress, therefore it will be important that you maintain and keep appropriate records. The PDP should be started at the beginning of your research, building on the information, experience and results you gain within each stage. Each researcher will have their RTP assessed annually by a panel during their research studies, which will normally coincide with your research programme assessments. Please remember the generic/transferable skills aspect of your ePortfolio is not a test – it is your assessment of your development.

3. Feedback
To assist and improve the provision and quality of your training it is important to provide feedback on your experiences. A feedback form will be provided after sessions on your Faculty Research Training Programme. At each formal assessment the panel will also discuss barriers/recommendations for self-development and training.

Guidelines for Research Students and Supervisors

Introduction
The purpose of these guidelines is to:
- Outline Newcastle’s practice and expectations of Research Students and Research Supervisors
- Provide good practice for Research Student’s on managing their doctoral studies and for Research Supervisors supervising Research Students

Summary of Newcastle Practice
These guidelines describe the essential elements of PGR student/supervisor, student/University relationships and detail the minimum requirements that a PGR student and PGR supervisor will be expected to comply with during a research programme at Newcastle.

1. It is the responsibility of each Head of School or nominee (usually the school director of postgraduate studies/tutor) in consultation with the proposed lead supervisor to decide whether to recommend the admission of an applicant to undertake postgraduate research in his or her school. In reaching this decision the Head of School or nominee should consider:
   (a) Whether the candidate is appropriately qualified for the proposed subject of study and whether adequate academic references have been received;
   (b) Whether the appropriate resources (e.g. library, computing, laboratory facilities, technical assistance) will be available;
   (c) Whether, on the information available, the subject of study is suitable for the degree for which the candidate is to be registered;
   (d) Whether it can reasonably be expected that the subject of study will be completed within the timescale prescribed;
   (e) Whether proper supervision can be provided and maintained throughout the research period;
(f) Whether an appropriate programme of training and guidance in research methods can be offered to the candidate.

2. At the commencent of the research programme, PGR students will have a formal induction at both Faculty and School/Institute level.

3. The supervisor will contribute to this induction by having a detailed discussion with the PGR student during which they will ensure that the PGR student has received, understood, and accepted the expectations of the research programme. Following this discussion, a formal Learning Agreement should be signed by both the PGR student and the academic supervisor or supervisors. A copy of the signed Learning Agreement must be sent to the relevant Graduate School Administrator within one month of registering on the programme, so that completion can be recorded on the PGR student’s record. The Learning Agreement can be found at the following web site: http://www.ncl.ac.uk/students/progress/assets/documents/LearningAgreement.pdf

The discussion should be recorded in the PGR student’s ePortfolio and should normally cover: the scope of the proposed programme of work and an initial definition of the subject of study with particular emphasis on:

- The importance of completing the programme in the time available;
- The standard of work that will be expected from the PGR student (students are advised to read successful theses available in the Library as a guide to what is expected).

This should form the basis of the PGR student’s project proposal, which will need to be approved before candidature is confirmed

a) The overall timetable for the planning and completion of the programme of work, including any period of preliminary reading and the writing of the thesis. This should be recorded by the PGR student in the Personal Development Plan (PDP) within ePortfolio;

b) Any programme of training and guidance in research methods, again recorded by the PGR student in ePortfolio;

c) Guidance about the use of literature, other sources of information, including other members of staff, and about attendance at appropriate courses and meetings of learned societies;

d) Appropriate guidance should be provided by the supervisor to enable the PGR student to avoid any possible concern about plagiarism or the fabrication of research results.

e) Good practice in relation to the storage and retention of research data (http://research.ncl.ac.uk/rdm/);

f) Constraints, other than time, which may affect the programme of work, such as costs and the need to design and build equipment and any ethical concerns;

g) An initial consideration of potential issues of confidentiality or intellectual property;

h) A programme of regular meetings between the supervisors and the PGR student to monitor progress on the research and to review the details of the overall timetable for the programme of work;

i) The submission of written work and/or the presentation of seminar papers while the
research is in progress and the possibility of presenting work at meetings of learned societies and/or of submitting it for publication.

j) Where the PGR student has a formal sponsorship, the supervisors and the PGR student should discuss terms and conditions of the sponsorship, to ensure they are understood.

4. PGR students are expected to:
   - Maintain regular contact with their supervisors,
   - To seek their supervisors’ advice on the planning of work and other matters, including the use of suitable techniques.
   - Present written work as appropriate.
   - Raise any problems and difficulties to the attention of their supervisors, which a student believes may have an impact on progress, which includes: domestic, social, financial or health factors.

5. Supervisors are expected to:
   - Maintain regular contact with their student and provide advice on work planning
   - Request written work as appropriate and provide the student with constructive comments

6. Approximately once a month, PGR students will have a formal meeting with their supervisors to review progress and are required to record and maintain records of these supervisory meetings in their ePortfolio. There should normally be three meetings during the year with the full supervisory team.

7. PGR students should also submit a project proposal for approval on ePortfolio within three months of registering on the programme. This should address the practicality of any fieldwork and whether there are any constraints, dangers or ethical concerns. Progression on the programme will be dependent upon acceptance of the project proposal by an independent school panel. Please note that before any fieldwork or outside study is conducted an Outside Study Form must be completed which is available at: [http://www.ncl.ac.uk/students/progress/student-resources/PGR/OutsideStudy.htm](http://www.ncl.ac.uk/students/progress/student-resources/PGR/OutsideStudy.htm)

8. Candidates registered for the degree of Doctor of Philosophy will have their registration for a doctoral award confirmed, provided that satisfactory progress is made and confirmed through Annual Progress Review, usually during the first year of study for those students studying full-time and during the second year for those students studying part-time. See Postgraduate Research Progress Regulations at: [http://www.ncl.ac.uk/regulations/docs/](http://www.ncl.ac.uk/regulations/docs/)

9. Progress on the programme will be formally monitored through annual reports (note that programmes with an initial taught component (e.g. Integrated PhD, Professional Doctorates) will have alternative monitoring arrangements, at least initially). Each year, PGR students and Supervisors will be required to submit a report on the progress of the research, which will be considered by an independent school progress panel. The progress forms are completed on ePortfolio and information on progression can be found at: [http://www.ncl.ac.uk/students/progress/student-resources/PGR/KeyActsAPR.htm](http://www.ncl.ac.uk/students/progress/student-resources/PGR/KeyActsAPR.htm)
10. As part of the progress review, PGR students will be required to produce at least one substantial piece of work (e.g. literature review, experimental write-up), in order to help assess their ability to proceed successfully through the programme. PGR students may be required to make a presentation of this work to other staff and/or students.

11. The report forms completed by the PGR student and the supervisors will be considered by a school progress panel, which will consider all the evidence, including the annual report from the supervisory team, and determine whether progress indicates that the research project will meet the standards for the award. The Progress Panel will make a report, and further progress on the programme of study is subject to approval by the Dean of Postgraduate Studies. In addition to detailed feedback that the Progress Panel may provide the Progress Panel will make one of the following recommendations:

1. That the candidate’s performance is satisfactory and that the candidate can proceed to the next stage. If the candidate is a stage 1 student the candidature to study for the Doctor of Philosophy is confirmed;
2. That notwithstanding some concerns, which the candidate and supervisory team should note, the candidate’s overall performance is satisfactory and that the candidate can proceed to the next stage. If the candidate is a stage 1 student the candidature to study for the Doctor of Philosophy is confirmed;
3. That the candidate’s performance is unsatisfactory and that a further assessment should be held within two months to determine whether progress on the programme will be recommended;
4. That the candidate’s performance is unsatisfactory and that a submission for a Master of Philosophy examination is recommended instead of a submission for a Doctor of Philosophy examination;
5. That the candidate’s performance is unsatisfactory and that no submission for a Master of Philosophy or Doctor of Philosophy examination is recommended, and that the student's candidature be terminated.

12. If at any stage throughout the period of study a PGR student feels that the standard of supervision received is inadequate or has been unable to establish an effective working relationship with a supervisor, these issues should first be raised with the Supervisors, School Director of Postgraduate Studies/ Tutor or Head of School. If it has not been possible to resolve these difficulties, a PGR student should inform the relevant Graduate School Administrator or Dean of Postgraduate Studies for advice and mediation. A PGR student may also consult directly with the Graduate School Administrator, the Faculty’s Postgraduate Tutor or Dean of Postgraduate Studies in confidence, without delay. The annual progress review, also provides a PGR student with an opportunity to raise any issues. If there are any issues a PGR student wishes to discuss, but not include in the progression report, the relevant Graduate School Administrator should be consulted in confidence for advice.

13. If at any stage throughout the period of study the supervisors feel that the progress of a PGR student is unsatisfactory or that the standard of work generally is below that expected, they should inform the PGR student in writing of the reasons for this opinion and the student shall be given the opportunity of an interview with the supervisory team.
Following this notice and any interview, the supervisory team may decide to monitor progress and/or attendance; additionally or alternatively, the supervisory team may require the submission of written work in addition to that already prescribed by their project proposal and plan. If the PGR student’s progress has not improved within such a period as shall be specified in the written notice, the supervisory team shall notify the Head of School or nominee and submit a report for review by an independent Progress Panel. The Progress Panel will make a report to the Dean of Postgraduate Studies on ePortfolio. Alternatively, following the written notice and any interview, the Supervisory team may immediately notify the Head of School or nominee and submit a report for review by the Progress Panel.

12. From time to time it will be necessary to deal with supervisory changes where colleagues are no longer available, though normally staff on study leave will continue their supervisory duties. Where it becomes impossible for a school to continue to provide direct supervision – for example because of the departure of the only member of staff able to supervise a particular topic – the matter should be drawn to the attention of the Head of School or director of postgraduate studies/tutor. The student should be consulted about any changes, and alternative supervisory arrangements should be put in place in good time and the Graduate School Administrator informed so that formal approval may be sought from the appropriate Dean of Postgraduate Studies.

14. A PGR student is required to maintain high standards of academic conduct and, in particular, to avoid conduct amounting to the fabrication of research results or plagiarism. (See the Standard of Academic Conduct). Additional guidance is provided on the right-cite web page http://www.ncl.ac.uk/right-cite)

(a) The fabrication of research results includes: claims, which cannot reasonably be justified, to have obtained specific or general results; false claims in relation to experiments, interviews, procedures or any other research activity; and the omission of statements in relation to data, results, experiments, interviews or procedures, where such omission cannot reasonably be justified.

(b) Plagiarism is the unacknowledged use of another person’s ideas, words or work. At one extreme, plagiarism is simply a form of cheating, such as where the whole or a significant part of work submitted towards an examination or degree is the unacknowledged work of another, copied slavishly from a book, research paper or electronic sources such as the internet. At the other extreme, plagiarism may occur accidentally, through poor standards of scholarship, or may concern insignificant parts of submitted work.

(c) If a PGR student is unclear as to what use may be made of the work of others in the field without raising concerns about plagiarism, then the PGR student should consult the supervisors. In most cases, the adoption of appropriate standards of scholarship will avoid such concerns. The following general guidelines may assist (further guidance is provided on the right-cite web page: http://www.ncl.ac.uk/right-cite):

i. Passages copied verbatim from the work of another must be enclosed in quotation marks. A full reference to the original source must be provided. The substitution of a few words in an otherwise verbatim passage will not obviate the need to use quotation marks and to provide a full reference.

ii. Students must always give due acknowledgement to the sources of ideas or data
which are not their own and are not truly in the public domain (for example, because they are novel or controversial) or are not widely held or widely recognized.

iii. Ideas and data which are the student's own or are truly in the public domain may be included without attribution, but should be expressed in the student's own words.

iv. Students must take care to distinguish between their own ideas or work and those of others. Any ambiguity in such a distinction could give rise to a suspicion of plagiarism.

v. Where the student's work is the result of collaborative research, the student must take care to acknowledge the source of data, analysis or procedures which are not their own.

15. The retention of accurate and contemporaneous records of primary experimental data and results is of the utmost importance for the progress of academic enquiry. A PGR student should maintain these records in a form that will provide clear and unambiguous answers to questions concerning the validity of the data or the conduct of the work that might arise at a later date. Such questions can arise during the course of subsequent investigations by the PGR student, colleagues, and others; accurate contemporaneous records are invaluable when this happens. In addition, errors detected following publication of experimental or other research results could be mistaken for misconduct if a PGR student cannot provide an accurate record of the primary data. It is important that a PGR student and their work should be protected from such misunderstanding.

The following guidelines will assist PGR students in this regard:

(a) Records of primary experimental data and results should always be made using indelible materials. Pencils or other easily erasable materials must not be used. Where primary research data and results are recorded on audio or video tape (e.g. interviews), the tape housing should be labeled as set out in (d) below.

(b) Complete and accurate records of experimental data and results should be made on the day they are obtained and the date should be indicated clearly in the record. When possible, records should be made in a hard-backed, bound notebook in which the pages have been numbered consecutively.

(c) Pages should never be removed from notebooks containing records of research data. If any alterations are made to records at a later date, they should be noted clearly as such and the date of the alteration should be indicated.

(d) Machine printouts, photographs, tapes and other such records should always be labeled with the date and with an identifying reference number. This reference number should be clearly recorded in the notebook referred to above, along with other relevant details, on the day the record is obtained. If possible, printouts, photographs, tapes and other such record should be affixed to the notebook. When this is not possible (e.g. for reasons of size or bulk), such records should be maintained in a secure location in the University for future reference. When a ‘hard copy’ of computer-generated primary data is not practicable, the data should be maintained in two separate locations within the University, on disk, tape or other format.
When photographs and other such records have been affixed to the notebook, their removal at a later date for the purpose of preparing copies or figures for a thesis or other publication should be avoided. If likely to be needed, two copies of such records should be made on the day the record is generated. If this is not practicable, then the reason for removing the original copy and the date on which this is done should be recorded in the notebook, together with a replacement copy or the original if this can be re-affixed to the notebook.

Custody of all original records of primary research data must be retained by the principal investigator, who will normally be the supervisor of the research group, laboratory or other forum in which the research is conducted. An investigator may make copies of the primary records for his or her own use, but the original records should not be removed from the custody of the principal investigator. The principal investigator is responsible for the preservation of these records for as long as there is any reasonable need to refer to them, and in any event for a minimum period of 10 years.

16. Supervisors will advise PGR students on the manuscript of the thesis in general and on content, presentation and organization. However, they will not act as proofreader. While they may read all or part of the first draft of the manuscript and offer advice, thereafter it is the responsibility of the PGR student to revise the manuscript and to decide when to submit the thesis.

NOTE ON HEALTH AND SAFETY

17. Supervisors are responsible for ensuring that students under their supervision follow the agreed University and, where appropriate, School, safety policy and procedures. Full details of the University’s safety policy are available on the University’s Occupational Health and Safety Service (OHSS) webpages: http://www.ncl.ac.uk/ohss/safety/ and from your School’s designated Safety Officer.

Good Practice for Research Students

Introduction

While the knowledge and skills that you gained as an undergraduate and/or in studying for a taught Master’s degree have given you a background in your subject and perhaps some experience of and insight into the process of research, they may not necessarily have equipped you to successfully study for a research degree. As Salmon (1992: 51) has put it:

‘Unlike a certificate, a diploma, a Bachelor’s or a [taught] Master’s degree, a [research degree] does not merely entail the consideration of already existing work within a pre-arranged structure but demands the creation of a personal project. To undertake [a research degree] is therefore to define oneself as having a contribution to make to the understanding of the area concerned.’

In seeking to make that contribution, you will have the advice, encouragement and support of your supervisors, of academic colleagues in the field, and of your fellow postgraduates, but ultimately the responsibility is yours. You may have to create the project; you will certainly have to undertake the research; you have to write it up as a dissertation or thesis; you have to complete on time and submit; possibly in the case of a Master’s degree and certainly in the case of a Doctorate, you will have to defend your work in an oral
examination; and if you do all of these things to the satisfaction of your examiners, you will be awarded the degree.

The purpose of these guidelines is to assist you to reflect on good practice in studying for a research degree. The guidelines are not intended to be prescriptive or exhaustive, just to indicate what has been identified in the literature and elsewhere as good practice. But a number of the matters covered do relate to the University's requirements of its research students, which are formally set out in its Guidelines for Research Students and Research Supervisors - Summary of Newcastle Practice, and it is essential that students read the latter as well.

The guidelines attempt to set out good practice in:
1. Establishing and maintaining a good relationship with your supervisors
2. Approaching a research degree
3. Preparing for research
4. Where appropriate, choosing a topic
5. Producing an initial research proposal and plan
6. Writing regularly
7. Dealing with academic problems
8. Dealing with non-academic problems
9. Reviewing the progress of the research
10. Framing your thesis
11. Writing your thesis
12. Preparing for examination
13. Publishing, networking, and developing your career.

1. Establishing and Maintaining a Good Relationship with Your Supervisors

Your relationship with your supervisors is crucial to the success of the research project, and you need to start it off well and maintain it over time. As Cryer (2001 p58) has put it:

‘The relationship between a research student and a supervisor can be a precious thing. Supervisors and research students work closely together over a number of years. Mutual trust and respect should develop, along with a working relationship that can continue, as between equals, long after the completion of the research degree. It is in your own interests as a research student to develop and nurture this relationship. At the very least, only a highly unusual student successfully completes a research degree if the relationship with the supervisor is poor.’

Starting off well involves, firstly, making an early appointment to see your supervisors in the first few days after your arrival; secondly, being clear about your respective roles and responsibilities; and thirdly establishing ground rules to govern your future relationship.

Until you have met with your supervisors, it is not possible to even begin the preliminary work on the project. While it can sometimes seem that, with one, two, or three years stretching ahead, the matter is not urgent, in reality, the time soon passes and it is vital to meet with your supervisors as soon as possible.

At the meeting, your supervisors will welcome you and, in many cases, devote at least some time to discussing your respective roles in the relationship so that you both know
what to expect of each other. This is vital because, as Delamont et al. (1997, p 14) have put it:

'Relationships [between supervisors and students] have to be worked at and discussed, because most of the later problems stem from a failure to set out the expectations that both parties have for the relationship.'

In general terms, supervisory support can include:

- Assistance with the choice of topic;
- Critical and constructive feedback on the work produced;
- Advice on the sources or literature used;
- Guidance on the methodology or techniques used and the approach to data collection;
- Discussion of evidence and results;
- Reading drafts and commenting on issues of substance.

Supervisors will not:

- undertake the actual research itself
- write or significantly re-draft papers or chapters
- conduct a detailed proof read of the thesis

In pointing out that it is up to you to do these things, supervisors are not being difficult, but realistic; a research degree is an award for successfully completing a personal research project, and for that to be the case you have to do the research, write it up, and make sure that the spelling, grammar, and punctuation are correct.

There are different models of supervisory team within the University. In joint supervision, the supervisory responsibilities are shared equally between members of the supervisory team. In other styles of supervision, different members of the supervisory team may have different roles. There may be, for example, a lead supervisor and a co-supervisor responsible for a smaller element of the planned research; or a lead supervisor and an advisor responsible for, and able to deal with, general and pastoral responsibilities. Since arrangements may vary the supervisory team must agree a clear distribution of responsibilities at the outset of the research and update this if arrangements change. It is important for the student to be aware of who will 'lead' on which aspects of the research project.

As well as having clear expectations about your respective roles, it is also important that you and your supervisors discuss ground rules for working together. These might be as below:
You agree to:
- turn up on time for supervisions and give as much notice as possible of cancellations
- be properly prepared for your supervisions
- write regularly and share the draft materials
- maintain the highest standards of academic conduct, as set out in paragraph 12 of the University’s Guidelines for Research Students
- maintain contact with your supervisor(s), particularly when studying outside the University
- undertake the tasks agreed to the best of your ability within the allotted time

Your research supervisors agree to:
- hold regular supervisions and give as much notice as possible of cancellations
- read work submitted promptly
- give written feedback

All of you agree to:
- treat supervision in a business-like way with an agenda
- keep records of supervisions detailing what was discussed, what targets were agreed, and when they were to be achieved by.

Of course, as with any relationship, that with your supervisors has to be worked at and maintained over time. In the early days, you are likely to be heavily dependent upon your supervisors as you begin to find your feet in research. Once you have found your feet, your supervisors will expect you to become more independent, and your relationship should develop into a dialogue in which you engage in academic debate on a basis of increasing equality. By the time you are nearing completion, you will come to know more about the work than your supervisors, but will still be dependent upon his or her expertise to advise whether the research project has reached the stage at which it should be submitted for the degree or whether further research and/or re-writing is required.

It happens that, occasionally, what should be the natural transition from dependence to relative independence does not transpire, either because the student remains over-dependent upon the supervisors or the latter is unwilling to 'let go'. Because of these possibilities, it is useful, over the course of a research degree, for you and your supervisors to discuss your evolving relationship at regular intervals. This gives the supervisors a chance to flag to you that they think that you are more than ready to spread your wings and fly alone, or you the chance to ask for more space to take the research in your preferred direction.

Very rarely, research students find that they are unable to work effectively with their supervisors, and the relationship is in danger of breaking down. (See Section 12 of the Guidelines for Research Students and Supervisors for more information.)

**Reviewing Practice**
Are you clear about what you can expect of your supervisors and what they can expect from you? Have you established ground rules for your future professional relationship?
2. Approaching a Research Degree

In order to be awarded a research degree, you have to satisfy the examiners that you have fulfilled the requirements for that degree as laid down in the University's regulations and as applied in your own subject. It is vital that, at the very start of your studentship, you are aware of what those requirements are to avoid latter errors. As one of the research students interviewed by Delamont et al. (1997 p 16) in their study of PhD students put the matter:

'A lot of mistakes I've made are the result of not asking questions and people not putting me right. They presume I must know...I didn’t know the PhD was meant to be an argument... [that] it’s meant to say something. I thought it was one of those old-fashioned monographs, a collection of information. When I was an undergraduate I used to think a PhD was one of those articles you read in the journals, a 10,000 word article, I used to think they were PhDs.'

Clearly, if the student had clearly understood from the start what a PhD was, then these mistakes could have been avoided.

It is therefore worth spending some time looking at what will be the end product of your studies. Your starting point should be to unpack the University's and, where appropriate, the individual research degree’s formal requirements for whatever research degree you are registered, these can be found in the University and degree programme regulations http://www.ncl.ac.uk/regulations/docs/. You should read these carefully and, preferably, discuss them with your supervisors so that you have a clear idea of what they mean.

While all research degrees have to meet the University and, where appropriate, the individual research degree programme requirements, they do this in very different ways, depending upon the discipline in which they are undertaken. It is therefore vital that you also have a clear understanding of what the relevant research dissertation or thesis in your discipline is like at the start of your studies. Your supervisors should recommend you go and look at a couple of theses in the same or in cognate areas to your own, and you would be well advised to do this and discuss key issues – for example in the case of PhD theses what made them original or how much of the thesis was publishable – in a supervision.

3. Preparing for Research

Most new research students naturally perceive research to be as it is written up in articles and books, which portray it as a seamless unrolling of (for example), theory, hypothesis, method, data collection, data analysis, results, and conclusions. But the published account is only the visible part of the iceberg; beneath it lies the nine-tenths of blood, sweat, toil, and tears, including the ideas that were discarded, the investigations that ended up in blind alleys, the correlations that were in the wrong direction, the experiments that gave negative results, and sometimes the sheer fluke that led to the substantive advance. Research can, for much of the time, be a messy, difficult, and frustrating process as any researcher, including your supervisors, will tell you.
But you can minimize, if not eliminate, the frustrations of research by thorough preparation at the start of your studentship. In particular, you can ensure that you are familiar with the resources available to support your project, that you are familiar with the processes of research in your discipline and that you are personally organized to undertake the project.

You need to be familiar with the resources available to support your research, both material and human. The former includes the library, centrally and locally-provided computing facilities, and any specialized equipment needed for your project; the latter includes academic staff and fellow researchers and research students in your school. You will be provided with opportunities to attend induction sessions relating to all of these resources, and it is vital that you take advantage and make sure that you know what is available, how to access them, and how to use them in ways that are conducive to the health, safety, and welfare both of yourself and others. In the latter context, you should read about the University’s Health and Safety Policy referred to in Part One of this Handbook and the relevant school health and safety policy and, if appropriate discuss this with your supervisors.

You also need to be familiar with what is involved in the research process and with good practice in doing research in your field, including the ethical issues that should be addressed. You must find out about the research training programme and attend; this is your opportunity to be informed about what is involved in research in your discipline by academic staff who are not only knowledgeable about the processes of research but also about the practice. As well as attending faculty events and, where appropriate, school training programmes, you will also find it helpful to read through one or more of the general texts about research (see for example Cryer 2000; Leonard 2001; Phillips and Pugh 2000; Wisker 2001) or ones relating to specific disciplines where your supervisors may be able to help with references.

As well as being familiar with the resources and the research process, you also need to be well-organized personally in terms of time, working conditions, and research materials.

With regard to time, as a full-time postgraduate research student you probably have more control over how you spend your time than at any other period in your working life. While this can be exhilarating, it can also, as Welsh (1979 p 33) has put it, 'be all too easy for the postgraduate to spend his [her] time pottering about' and fall behind in meeting what are tight deadlines to complete the project. If, for this reason, time management is vital to full-time students, this is even more the case with part-time ones who may well be combining a job and/or a family with their research. For this reason, it is well-worth adopting explicit time management techniques (see for example Cryer 2000 pp 91-106, Graham and Grant 1997 pp 42-45).

With regard to working conditions, the demands of research are, or can be, very intense, and you need an appropriate working environment in which you can read, reflect, think, evaluate, and write. You need to establish what facilities are available in your school or, if you undertake work at home, create a suitable space.

With regard to research materials, this covers both data and results generated in the course of the research and sources such as books, articles, papers, and other theses. In
In terms of other sources, it is important that you index and store them so that they are immediately accessible when needed – there is nothing more frustrating than being in full flow writing up a piece of work and then being unable to find the source for that seminal point which, you have just realized, will tie the chapter together. You should assume that anything that you read may well find its way into the dissertation or thesis, take full details of the reference (preferably in a database organized in terms of whichever referencing system you will use for the final work), and put any materials into a filing system with an index which makes it easy to retrieve.

Last, but not least, there is the obvious point that, where data and or sources are stored electronically, they must be backed up with a second copy kept in another place. Research can be frustrating enough without losing weeks or sometimes months of work through failure to back up a file.

Reflecting on Practice
Are you fully aware of the range of resources available to support your research project? Have you developed the skills to use them effectively? Are you aware of health, safety and welfare policies? Do you understand from your faculty and or school training programme what is entailed in the research process in your subject? Are you managing your time effectively? Do you have adequate facilities for your research? Do your arrangements for retaining and storing data meet the University's requirements? Have you organized your references and sources so that you can access them quickly? Do you regularly back up your work? Do you keep the copies in another place?

4. Choosing a Topic
In many cases, and particularly in engineering and the sciences, students are often recruited to research a particular topic which has been pre-defined by the supervisors. But, occasionally in these fields and frequently in others, students are recruited on the basis of their interest in working in a broadly defined area of the subject, which has to be narrowed down sooner or later to a specific topic. This can be a very difficult time for research students; as one of the research students interviewed by Delamont et al. (1997 p 27) said about their search for a topic:

‘...the whole thing seemed very daunting, you don’t know where your niche is, or even if there is one for you.’

So, you can spend valuable time searching for a niche and then, when you think that you have found one, the topic turns out to be far too ambitious. So, you find yourself thrashing around in a seeming intellectual vacuum again, and so it goes on.

It is important to remember that this is by no means abnormal and that you should receive strong support at this stage from your supervisors. What they might do (or what you can do yourself) is to take an apparently promising project and subject it to the six key tests; (i)
is it worth doing?; (ii) in principle, could it be done?; (iii) could it be done within the time available?; (iv) do you have, or could you acquire, the knowledge and skills to do it within that time?; (v) would it sustain your interest?; and (vi), if you did complete it successfully, would it meet the requirements for the research degree?

It may take several iterations before both you and your supervisors are confident that you have a topic which will meet these key tests, and which will give you a starting point for your research. It should, however, be noted that it is only a starting point; as the research develops it may change, and the final topic may be different from that with which you started out. This is by no means abnormal, but it is important, in consultation with your supervisors, to keep track of the evolution of the topic and ensure that the result will still pass the six tests.

Reflecting on Practice

Does your topic fulfil the six tests set out above? Have you discussed this with your supervisors? If it has changed, does the revised topic still meet the tests?

5. Producing your Research Proposal and Plan for Project Approval

It is a requirement of the University’s Code of Practice for Research Degree Programmes that research students should, in conjunction with their supervisors, produce and agree their research proposal and plan for formal project approval within the first three months of registering on your research degree programme. The project proposal, plan and supervisory team will be considered by a school panel, and then the Head of School or nominee prior to formal approval by the Dean of Postgraduate Studies.

In some cases, the research proposal may have been pre-approved (e.g. in a Research Council application), but it should still be submitted together with a project plan and a supervisory team list to the project approval panel to ensure that the project is achievable within the time-scales allowed and to confirm that sufficient resources are available within your school/institute.

At their simplest, research proposals and plans set out what research students are proposing to do in their research projects, and when they are proposing to do it by.

With regard to a research proposal, a simple guide to drafting one might be to try and address the eight key questions of:

<table>
<thead>
<tr>
<th>What is the topic of my research?</th>
</tr>
</thead>
<tbody>
<tr>
<td>What have others written on this topic?</td>
</tr>
<tr>
<td>Where appropriate, what conceptual/theoretical frameworks might be useful in approaching my research?</td>
</tr>
<tr>
<td>What method or methods might be useful in undertaking that research?</td>
</tr>
<tr>
<td>How could I go about designing the research?</td>
</tr>
</tbody>
</table>
In addition, there may be specific guidelines from your school and/or your supervisors which should be followed in writing a research proposal. The draft proposal should then be shown to, and discussed with, your supervisors and amended in accordance with his or her comments before submitting your research proposal and plan for formal Project Approval.

With regard to an initial research plan, this involves unpacking what the tasks will be and assigning target time values to them which will enable you to complete on time. So, for example, for a three-year PhD in the social sciences, the initial research plan could be as below:

<table>
<thead>
<tr>
<th>Month</th>
<th>Research tasks</th>
<th>Writing tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reading around the research topic</td>
<td>Mini-reports on aspects of the research topic – identify a possible academic contribution</td>
</tr>
<tr>
<td>2</td>
<td>Narrowing down the research questions</td>
<td>Short-list of questions</td>
</tr>
<tr>
<td>3</td>
<td>Obtain Project Approval</td>
<td>Outline research proposal and plan/timetable</td>
</tr>
<tr>
<td>4-5</td>
<td>More detailed scoping and reviewing of literature</td>
<td>Literature evaluation</td>
</tr>
<tr>
<td>6</td>
<td>Reading on concepts, methods and techniques</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Finalising concepts, methods and techniques to be applied</td>
<td>Full research design</td>
</tr>
<tr>
<td>8</td>
<td>Preparation of pilot study (if relevant)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Administration of pilot</td>
<td></td>
</tr>
<tr>
<td>10-11</td>
<td>Preparation of main study</td>
<td>Evaluation of pilot study</td>
</tr>
<tr>
<td>12-24</td>
<td>Data collection</td>
<td>Field work reports</td>
</tr>
<tr>
<td></td>
<td>Data coding</td>
<td>Reports</td>
</tr>
<tr>
<td></td>
<td>Data analysis</td>
<td>Analytical reports</td>
</tr>
<tr>
<td></td>
<td>Data interpretation</td>
<td>Preliminary conclusions</td>
</tr>
<tr>
<td>25-31</td>
<td>Reworking previous chapters of thesis</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td></td>
<td>First full draft of thesis</td>
</tr>
<tr>
<td>31-34</td>
<td></td>
<td>Revised draft of thesis</td>
</tr>
<tr>
<td>36</td>
<td>Submit</td>
<td></td>
</tr>
</tbody>
</table>

How could I collect my data?

How could I analyse my data?

How might my findings contribute to knowledge in this field?
Once you have an initial research plan, then it is important to discuss it with your supervisors, check that it is realistic in terms of the allocation of time to task, and if necessary, amend it.

It should be stressed that, as with the topic, both the initial research proposal and the plan may well be subject to change over the course of the research as the focus perhaps changes as do activities and in consequence the timings. This is normal and not, in itself, a cause for concern – the proposal and the plan are intended as a flexible framework and not as a cage. But it is important that, at regular intervals during the research project, you and your supervisors review the proposal and the plan and update them to reflect the evolution of the research project. This should help you to keep track of where the project has been and where it is going and, most crucially, whether you may need to step up a gear to keep the project to time.

### Reflecting on Practice

Have you, in conjunction with your supervisors, agreed an initial research proposal and a research plan? Do you review them regularly with a view to updating them and keeping the research project on track?

### 6. Writing Regularly

As you begin to make progress with your research, you should put pen to paper as soon as possible, for four reasons. Firstly, it enables you to keep a record of what you have done from the start to serve as a basis for later work. Secondly, it encourages you to reflect on what you have done so far and think about where you will go from here. Thirdly, it gives your supervisors the chance to see what has been done, and to advise you about how to proceed. This is crucial, and it is in fact a University requirement (Guidelines for Research Students and Supervisors, Section 9) that research students following programmes that will take more than one year of study should produce at least one substantial piece of written work in their first year. Fourthly, it gets you into the discipline of academic writing at an early stage rather than leaving it until later when it is more difficult to acquire.

But, in some cases, students are reluctant to produce written work. Research (see for example Graham and Grant 1997, Delamont et al. 1997; Murray 2002) suggests that there are two major factors which constrain research students from writing. One relates primarily to lack of experience of writing regularly at all, of producing longish pieces of work, or of producing academic writing with its demands of precision, clarity, organization and explicit structure. The other factor is confidence. Whereas, as undergraduates or postgraduates, students outlined and discussed the work of other people, as research students their writing becomes, or should become, a presentation of their own views, ideas, thoughts, etc. This can leave students feeling very exposed and, particularly if their standard is published work, very dissatisfied with what they have achieved. For these reasons, they may be psychologically reluctant to write.

One way of ensuring that you write regularly is, as Blaxter et al. (1996* pp 5-59) have suggested, to keep a research diary on a daily basis recording what you have done, time spent on it, analysis, and speculation. This gets you into the habit of writing regularly, recording, and reflecting, and can provide a useful basis upon which to construct longer
pieces of work.

In constructing longer pieces, you can make what may seem a Herculean task more manageable by breaking it up into smaller ones. So, initially, you might write a one-page abstract of the chapter setting out its aim (purpose), content (what it would cover), and possible conclusions (what it would add). With that thought through and discussed, the next stage would be to write a synopsis fleshing out the abstract and setting out headings and sub-headings to be used. Then, with a framework established, you can to fill it in piece by piece until you have a draft chapter.

In order to improve your academic writing, you can read books on the subject (for example: Dunleavy 2003; Murray 2002), ask your supervisors for examples of such writing from the literature in the field, or even pair up with another research student who will undertake to read drafts and suggest improvements in return for similar support from you for their efforts.

In terms of overcoming psychological reluctance to write, you can, as Murray (2002) has suggested, 'free-write', i.e. write it down as it comes without any attempt to structure or present it for an academic audience. This takes the pressure off you and although, at the time, you may feel that it is worthless, you can be surprised to return to it later and find that it does take you forward.

Additionally, and provided that you warn him or her beforehand that it is a free-written draft, it can be useful to show it to your supervisors and gain some feedback. Supervisors are aware from their own experiences that virtually all research starts-off very rough-hewn and will allow for this, and of course most would prefer a 'messy' draft of a chapter from one of their research students rather than nothing at all.

It may be noted that, while writing is a necessary task for all research students, it is inherently a more difficult one for students whose first language is not English and who have perhaps been educated within different styles of academic discourse. Your supervisors may be able to assist by discussing examples of writing with you, your faculty may offer a programme and, in-sessional English language courses are available, which can provide support with your academic writing in English (http://www.ncl.ac.uk/students/insessional/)

Reviewing Practice
Have you started writing as early as possible in the research project? Are you writing regularly? Are you showing your written work to your supervisors? Would you find it useful to have some assistance with academic writing in English?

7. Dealing with Academic Problems
While you can be well prepared for research, it is frequently the case that, at some point during the project, you experience academic problems of one kind or another. Common ones include:

♦ Drifting from the topic
  As the research progresses, highways and byways of new exploration open up which just have to be investigated because they could be vital. So, you become lost in the
maze of possibilities and unable to establish where you should be at that stage of the project.

- **Difficulties with the methodology/methods**
  Particularly in the arts and humanities and social science, the section of your thesis on methodology/methods can require you to grapple with a whole range of unfamiliar philosophical, theoretical, empirical and experimental problems, and it can be frustrating to try and identify, tackle, and resolve these, particularly when you want to undertake the substantive research.

- **Problems with the substantive research**
  You can expect a range of problems to occur as you undertake the substantive research – evidence that you can’t obtain as easily as you hoped, experiments that don’t work, apparently promising lines of enquiry which turn out to be dead ends, simulations which don’t run properly – the list is endless.

- **Drowning in data**
  You collect masses and masses of data, start playing around with them, and find all sorts of interesting things that can be investigated in and around the topic and then even outside it. As a result, you are unable to discriminate between what to concentrate upon in your research project and what to leave out.

- **Unexpected results**
  With the substantive research accomplished, you find results which you did not expect – the evidence which is contradictory, the experiments which yield negative results, the cast-iron assumptions which are apparently falsified, the simulation results which defy predictions, variables which behave badly etc. etc.

If you hit problems of these kinds or others, it is important that you are not afraid to admit, not least to yourself, that you are in difficulties. Research students tend to have previously sailed easily through undergraduate and taught postgraduate programmes and it can, to say the least, be a shock to be brought shuddering to a halt while engaging in research. Students may find it hard to admit this for reasons which Atkins (1996* p 2) has termed ‘Top Gun’ syndrome whereby:

‘...students are seen...as the best and the brightest. Significant academic achievement has led them to their current place. They are thus unable to admit faults or shortcomings for fear of ‘showing themselves up’ in the...academic community. It becomes better to struggle on with barely a clue about what is going on than to admit...that one does not know what is happening.’

If you have problems, you should acknowledge them secure in the recognition that this happens at one time or another to all researchers as well, i.e. it is all part and parcel of doing research.

In terms of resolving problems, you might start by trying to think through how you can overcome them yourself. If you feel that you are drifting aimlessly in terms of the topic, you might re-visit your research proposal and plan and re-assert the initial focus of the research; if methodology is a problem, look at other books or theses in the area for models of how to proceed; if one avenue of the substantive research has been blocked off, look for another; if you are drowning in data again go back to the research proposal and plan to re-
focus the analysis; for unexpected results, see if there is a substantive explanation – many important contributions to knowledge have come from the explanation of apparent inconsistencies.

You may also wish to consider sharing the problem with a fellow-research student, particularly perhaps one who is further on in his or her studies and who may be able to offer advice on the basis of their own experience. Some schools/institutes encourage such a collective approach to problem solving by pairing research students so that they can support each other. Alternatively, if you are part of a research group, it may be that one of your colleagues can assist.

You should, of course, ask for assistance from your supervisors. As an experienced researcher, he or she will be familiar with the problems of research both generally and in the specific subject area and should at least be able to help you to think through the problem and to suggest ways in which you might go about resolving it.

Referring on Practice
What academic problems might you expect to meet in the course of your research project?
How would you go about resolving them?
What sources of support are available to help you resolve academic difficulties?

8. Dealing with Non-Academic Problems
As well as experiencing academic problems of one kind or another, research students may also experience a range of non-academic problems arising from their situation. Three common ones are self-doubt, isolation, and boredom.

You may, particularly in the early stages of a research degree, experience bouts of self-doubt. These can arise from the situation of a research student; as one of the respondents to Delamont et al’s (1997: p 27) survey put the matter: ‘...you are suspended between a student who just absorbs things and an academic who produces [them], and that [leads to] all kinds of paranoias or neuroses.’

Self-doubt often takes the form of anxiety about whether you will be able to make a successful transition from being primarily an absorber of, to being a contributor to knowledge, and it can be associated with a reluctance to write or at least to submit written work to your supervisors in case it is 'not good enough'.

It is worth noting that such self-doubt is not uncommon, and that dealing with it is part and parcel of the experience of being a research student. In terms of how to deal with it, the key thing is to write – no matter how mundane you think that the piece or chapter is – and show the work to your supervisors. While you are, of course, bound up in the research, and are often unable to judge the contribution that you are making – in time even the most original insights come to seem commonplace to their creators – your supervisors have a greater degree of objectivity. He or she is far better placed to ascertain how you are progressing, and to offer guidance and support for your work.

As well as self-doubt, one of the most consistent findings of the literature on research students over the past three decades (see for example: Becher 1994 143; Cryer 2000;
Delamont et al. 1997; Leonard 2001; Phillips and Pugh 2000; Rudd 1975; Rudd 1985) is that research students can feel isolated.

At school and as undergraduates or postgraduates on taught programmes, you study a common syllabus in the company of your peers. But, as a postgraduate research student, unless you are working on a group project or in a large and active research school, you find yourself working on your own project and often without the company of others. This can lead to intellectual isolation – you are the only one in the world working on this topic – and social isolation at the workplace as you plod away on your own in the library or the laboratory. Here, Cryer’s (2000 p 41) advice is pertinent:

‘...you should put effort into warding off isolation. You need to be on the constant lookout for people who both know enough about your field to be able to discuss it meaningfully and have the time to do so. You may find such people in your family, your social group, or in your department... However, if you have to go outside into a national or an international arena, so be it. Overcoming isolation or potential isolation must be a major objective for all research students.’

A third common feature of the life of the postgraduate student which has been identified in the literature (see Phillips and Pugh, 2000, pp 77-78) is the tendency towards boredom. This tends to happen when you are well into your research, and have reached a stage where, as Cryer (2000 p171) puts it, ‘your work genuinely is excessively routine and monotonous’. So, you’re churning it out day after day, and you become bored with the whole thing and ripe for distractions which will take your mind.

There is no simple neat solution to this problem – if you want to complete you have to continue the research – but it can be beneficial to either do something else (write or re-write an earlier chapter) or even, with the approval of your supervisors, take a short break.

While these, of course, are non-academic problems arising out of being a research student, you may encounter other difficulties of a personal, social, and financial character that have a bearing upon your research. You should certainly alert your academic supervisor, who is your personal tutor, to any such difficulties that you may be experiencing, or if you feel this is inappropriate, then you also have access to the full range of School and University support services outlined in Part One of this Handbook.

9. Reviewing the Progress of the Research

One of the key tasks of research students is to review the progress of their research. This involves variously self-review, formal reviews with supervisors, and participating in school and University review procedures.

Research students are under considerable pressure variously from sponsors, bank managers, the University, and Schools to complete their degrees within the allotted time. Your chances of completing on time or as near as possible will be significantly enhanced if you treat the research as a project and actively manage it to meet the deadline. The skills that you need to do this may well be imparted in your research training programme or, if not, you can consult one of the texts, e.g. (Cryer 2000; Graham and Grant 1997; Phillips and Pugh 2000).
Either way, you should find that one of the critical recommendations is that you should treat your research plan not as an exercise to be completed at the start of the studentship and then filed away, but as a ‘live’ document to be reviewed and updated frequently and regularly over the duration of the project. You should, then, consult it regularly; update it in the light of your progress to date; consider the implications for the completion of the research; and, as far as possible, act to keep the project on track. It may be noted that such self-review will not only help you to finish your research degree as soon as possible, but also enhance your project management skills and your attractiveness to employers.

As well as self-reviewing, the University requires that you also formally review your progress with your supervisors at least once per term, i.e. three times per year. It is important that you treat these supervisions in a professional way as an opportunity to discuss the progress of your research with your supervisors and that you keep a record of what was discussed and what action points were identified.

As well as student and supervisors review, School Progress Panels will also have formal procedures, usually involving the submission and/or presentation of pieces of work for annual progress review. It is worth noting that, while these review procedures are intended to assure the faculty that your progress is satisfactory, they are also intended to be helpful to you. They give you the opportunity to gain feedback on your work from senior researchers in your school.

### Reflecting on Practice
Do you have a strategy for personally reviewing the progress of your research project at regular intervals? Do you approach supervisions to review your progress in a business-like way?

#### 10. Framing Your Thesis
After spending the best part of one, two or three years of your life training to do research and then undertaking the actual research for your project, you are then faced with what is the last major task of producing your thesis. This task is absolutely crucial because, as Cryer (2000 p177) has put it:

‘The thesis is the culmination of [the] research student’s entire research programme, and it is on the thesis that he or she will be examined and judged.’

This, of course, raises the question of ‘what is a thesis?’ While there is no objective definition of a thesis and there are variations between what is expected in different disciplines, one common factor is, as Barnes cited Blaxter et al. (1996* p 27) has put it, that:

‘A [thesis] is far more than a passive record of your research and generally involves presenting an argument or point of view. In other words, it must say something and be substantiated with reasoned argument and evidence.’

So, producing your thesis involves more than throwing everything you have done into the pot and hoping for the best; it has to involve a case or point of view and be substantiated with reasoned argument and evidence.

This can be difficult to do because, to put it at its simplest, often we cannot see the wood...
(the thesis) for the trees (the mass of writings and materials we have accumulated over the course of the research). So, in order to produce a thesis, we need to know the shape of the wood, i.e. a framework for our thesis.

There are many ways of developing a framework for your thesis, and it is worth consulting your supervisors about suitable approaches. One possibility suggested in the literature (see for example Cryer 2000; Taylor 2002) is for you to think of yourself as an explorer who has undertaken a journey and who is writing a guidebook. As the author of the guidebook, you need to explain:

- where you started from
- what other guidebooks you read
- why you decided to undertake the journey
- how you decided to approach the journey
- the route you decided to follow
- for the Doctoral degrees, the original discoveries you made on the way
- where you arrived at the end of the journey
- how it differed from the starting point
- where you would go from here in future.

You can literally map this on a couple of sides of paper, and then re-trace the journey. At each stage you need to ask the questions; What is it vital to say to take the reader on to the next stage?; What is important but not vital?; What is neither important nor vital? By this process, if necessary repeated several times, you should be able to distil the essence of the thesis (the vital) and separate it from the important and the relatively unimportant.

With, hopefully, a stripped-down and clear route, you can then begin to fill in each stage of the journey in terms of key topics which you have to address, which you use to flesh out your map. You can then apply the same tests as above – are they vital, important, or neither – and go through a similar iterative process. Then, within the topics, this can be repeated with sub-topics until, eventually, you have a complete map of the thesis.

Such an approach has a number of advantages. Firstly, it gives you an overall framework for your thesis; secondly, it divides the writing into manageable tasks; thirdly, and vitally, it can be discussed with your supervisors before writing up; fourthly it highlights the key things you need to bring out in terms of discoveries (originality), added knowledge and understanding (the differences between the start and end point), and future research in the area (where we go from here); and finally may translate into the structure for a thesis. So, for example, in the case of many PhDs, the translation is:

<table>
<thead>
<tr>
<th>'Journey'</th>
<th>Thesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting point</td>
<td>- Introduction</td>
</tr>
<tr>
<td>Guidebooks</td>
<td>- Literature review</td>
</tr>
<tr>
<td>Reasons</td>
<td>- Trigger</td>
</tr>
<tr>
<td>Approach</td>
<td>- Methodology</td>
</tr>
<tr>
<td>Route and</td>
<td>- Substantive research chapters</td>
</tr>
<tr>
<td>discoveries</td>
<td></td>
</tr>
<tr>
<td>Arrival</td>
<td>- Analysis and results</td>
</tr>
</tbody>
</table>
### Research Guidelines

#### Writing Your Thesis

Once you have established a basic framework, you still, of course, have to write the thesis. Here the three key issues to consider are; who am I writing for? (audience); how do I actually go about writing it? (drafting); how do I make sure that it reads well? (presentation).

A research thesis, like any other piece of writing, is a form of communication, and it is necessary to consider in advance the audience that you are addressing and how you might meet their needs. Here, Cryer (2000 p 178) has some good advice:

> ‘The crucially important audience for theses are external examiners. Think of them as individuals who are exceptionally busy and grossly underpaid and who therefore have to read theses quickly. They will expect them to be well-structured and to be argued coherently to make the case for certain solutions to specific research problems. Irrelevancies will irritate, as will having to tease out meaning that research students should have extracted themselves. Think of them also as individuals who are very able and experienced in the general area, which means that the background material should be as concise as is consistent with showing that it is known. ‘However, no external examiner can be an expert in your work. By the time you finalise your thesis, you and you alone are the world’s expert. So the aspects that make your work significant and original and worthy of a PhD... need to be argued coherently; each step needs to be spelled out, the outcomes must be stated unambiguously, and all their implications identified and discussed in depth.’

So, for your examiners, the thesis needs to be:

- (i) well-structured
- (ii) argued coherently
- (iii) relevant
- (iv) concise in the literature review
- (v) expansive and detailed on areas in which the thesis makes a significant and original contribution to knowledge.

Clearly (i) to (iv) above apply to all research degrees, while (v) applies particularly to the Doctoral degrees.

(i) and (iii) above clearly have a bearing on what you write; (ii) has a bearing on what you include when you write, and (iv) and (v) have a bearing on the proportion of the thesis taken up by each heading. So, for example for Doctoral degrees, you should certainly not aim for half of your thesis to be taken up by the literature review, a further quarter by the methodology, and only a quarter for the original scholarship.

What it can be useful to do is to produce a rough distribution of how much should be devoted to what part of the thesis. Such a distribution, produced by the University of Warwick as a guideline for PhD students (cited Blaxter et al. 1996* p 217) are set out below:

<table>
<thead>
<tr>
<th>Differences</th>
<th>- Added knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future</td>
<td>- Directions of research</td>
</tr>
</tbody>
</table>

#### Differences

<table>
<thead>
<tr>
<th>% of thesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>55</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>20</td>
</tr>
</tbody>
</table>
Introduction | 10  
Literature review | 20  
Methodology | 15  
Research findings | 20  
Discussion | 20  
Conclusions | 5  
Bibliography | 10  

While the percentages may vary in different cases, it is crucial to plan them with the needs of the audience in mind.

With the needs of your audience in mind, it is then possible to proceed to drafting. One of the (few) common factors in the research degree experience is that it almost always takes far longer to write up the thesis than had been planned. The reason for this is that, when we finally write up, we have finished the substance of the project and now have, or should have, the benefit of hindsight, which leads us to change, amend, and modify the draft. While this is an entirely legitimate and valuable part of a research degree – it is in fact learning from what we have done – it can result in considerable delays in producing a first rough draft.

You should then review this yourself. Here it can be very useful to look at the *Handbook for the Examiners of Research Degrees* which sets out the criteria the Examiners will apply to your thesis. You should apply these then, if necessary, re-draft the thesis and ask your supervisors for comments. Following that, you should re-draft in the light of their comments, review it again yourself, and so the cycle continues until a final draft emerges. (http://www.ncl.ac.uk/students/progress/assets/documents/Examinerhandbook1718.pdf)

As well as meeting requirements for the substance of the research degree, it is also vital that the draft is well-presented, for two reasons. Firstly, while good presentation cannot rescue a poor thesis, it may help a marginal one, i.e. the examiners may be inclined to take a more charitable view if the thesis is easily readable and, as far as possible, error-free. Secondly, inadequacies in expression and errors in spelling and grammar are one of the most common reasons for the referral of theses, i.e. for these being accepted subject to minor corrections. It can be extremely galling to have to spend a month or two correcting elementary mistakes and errors, not just to you but to your internal examiner who will be landed with the task of checking that your errors have been corrected before the degree can be awarded. **It is important that you get this right before you go further.**

You should:
- ensure that you have expressed yourself as clearly and concisely as possible (reading out loud can often help to identify over-long sentences and unnecessary padding)
- check the grammar and the spelling (it is your responsibility to do this and not that of your supervisors)
- check that you have the right words (spell checkers can tell you whether the word is spelled correctly but not if it is the right word in the first place)
- check the footnotes/endnotes, quotations, citations etc. both in the text and in the bibliography (remember, your examiners will check a sample)
Given that many of us can be blind to our own deficiencies and errors, it can be very helpful to ask a friend with some expertise in the area to comment on the comprehensibility of the draft and to also ask him or her to check it for errors.

With this done, it is back to your supervisors for a final re-read and, hopefully, the green light to go ahead and submit the thesis for examination. If your supervisors still have reservations, you can still submit – ultimately it is your decision – but you would be well advised to consider this very carefully for fear of falling at the final fence.

In preparation for submission you should check the University’s regulations about submission available on the University’s webpages at: http://www.ncl.ac.uk/students/progress/student-resources/PGR/exam.htm.

**Reviewing Practice**

Are you clear about the audience for which you are writing? Have you decided upon an appropriate balance between the lengths of the various parts of the thesis? Have you reviewed your thesis using the Handbook for Examiners? Has your lead supervisor seen the draft? Have you taken their comments on board? Have you asked their advice about submission? Have you checked the University's requirements in terms of the submission of theses?

---

### 12. Preparing for Examination

Following submission of the final title of the thesis, examiners are appointed, normally one internal and one external examiner. In the case of Master’s research degrees, the process of examination normally involves the assessment of the dissertation or thesis by the examiners but, in the case of the MPhil may involve an oral examination. In the case of the Doctoral degrees, University regulations require an oral examination, i.e. a viva.

Oral examinations are comparatively rare in undergraduate and taught postgraduate programmes; in most Universities, they are only held if there is some doubt about the class of degree to be awarded, although in some they are mandatory for the award of a First.

But, of course, oral examinations are compulsory for the award of the Doctoral degrees. The implication of this is, of course, that candidates starting PhDs/MDs often have little or no experience of oral examinations. While they gain some by defending their work at progress reviews, this is still a far cry from the full rigour of a formal oral examination.

This might be of little consequence if, as in many other European countries, the oral examination was a public affair and they could go along and experience what happened. However, the British oral examination rarely gives access to people other than the examiners. Again, this might not matter if there were published guidelines for the oral examination at, but this is not always the case. So, as Burnhan (1997 p 30) has put it '

*...what occurs in the lengthy "judgely huddle" from which postgraduates emerge either victorious or distraught is a mystery*'.

In consequence, as Delamont *et al.* (1997 p 148) have written:

*The [PhD] student may well fear and dread the [viva] examination.*

*Even when the student is outstandingly competent, and however excellent the thesis*
However, you can prepare for your viva in six main ways.

Firstly, it is important to understand what oral examinations are about, i.e. their purposes, procedures, and outcomes. These are explained in detail in the University's Handbook for Examiners of Research Degrees which is set out in this part of this Handbook. You will find it helpful to discuss these with your supervisors.

Secondly, you need, of course, to be thoroughly familiar with your thesis. While this may seem strange since you wrote it, it is amazing how quickly you can forget what you have written, and you do need to re-read it. Often, you will find typos and other errors you have missed earlier – if so, list them and take them with you to the oral examination to show your examiners that you are aware of them.

Thirdly, you need to keep up to date with the literature in your area in the hiatus between submission and the oral examination. If a key paper comes out during that period, your examiners may ask you about it and about any implications for your work, and it obviously creates a good impression if you are aware of it.

Fourthly, as well as being prepared for questions concerning new literature, it can also be useful to anticipate the sorts of questions you might be asked and at least think about how you will answer them. There are some fairly obvious general ones (e.g. 'Why did you do this topic?' 'Why did you study here?' 'What would you have done differently if you were doing the research now?' 'What do you think the implications of your work are for the field?') for which you can prepare.

Fifthly, you can ask your supervisors to arrange a mock oral examination in which colleagues who are experienced in examining question you on key parts of the thesis and afterwards give you feedback upon your performance. Such an opportunity, which a number of faculties provide as part of their progress monitoring procedures, is invaluable in enabling students to prepare themselves both intellectually and psychologically for what is to come.

Finally, on the day itself, you need to be prepared for the experience. You should go to the oral examination as well-rested and fed as possible, and appropriately attired – it is a formal occasion so you need to be well-dressed but as you will be sitting down for a couple of hours and possibly more you need to feel comfortable as well. You should take with you:

- a copy of your thesis (preferably loose-bound so you can find pages quickly)
- pen and paper if you need to jot questions down or possibly draw diagrams
- where appropriate, a list of corrections
- copies of any original results, print-outs, or raw data which may be helpful in substantiating key points made in the thesis

Following Cryer (2000 p 197), you should:

- be composed when you enter the room
- sit squarely on the chair, not on the edge
- ask for anything not to your liking in the room to be changed, e.g. your seat moved out of sunlight
research guidelines

- wait for questions to be asked of you by the examiners
- show that you are listening attentively
- ask for clarification if questions are unclear
- take whatever time you need to answer them
- defend your thesis without becoming wholly defensive, i.e. be prepared if necessary to concede points
- be scholarly in your approach, i.e. give answers weighing the pros and cons before reaching balanced conclusions

When the examiners have finished their questions, they may well ask if there is anything you wish to say; this is an opportunity for you to clarify or expand upon any answer which you felt did not do you justice, or raise any other matters concerning the examination.

At the end of the oral examination, the Chair should ask you to leave while the examiners deliberate, and afterwards you will normally be called back in to be informed of the examiners' recommendation.

In many cases, the recommendation will be to award the degree subject to making minor corrections (usually spelling and grammar) to the satisfaction of your internal examiner. In others, it will be award subject to making minor revisions within six months, and in a few making major ones within twelve months. While these recommendations may be disappointing, it is important to remember that the examiners' expectation is still that you will eventually pass, and they are required to specify what you need to do to make the grade. Other outcomes, i.e. the award of a lower research degree or a fail, are mercifully rare. But, if this does happen and you have reason to believe that this relates to unfairness in the examination procedure, you have a right to appeal, and details of the University's appeals procedure are set out in Part Four of this Handbook.

But, in the vast majority of cases, you should only need to do one thing after the oral examination - celebrate.

13. Publishing, Networking, and Developing Your Career

There are three other areas of good practice for research students, namely publishing, networking, and developing your career.

If at all possible, you should try and publish work during your studentship; this can help to mark out your academic territory, bring you into contact with others in the field, boost your self-esteem — it is a coup to be published when still a graduate student — and provide a better platform for employment, particularly in the research field inside or outside the universities. Your supervisors should be able to advise you about whether your work should be published and, if so, how to go about it.

Also, you should consciously network within the academic and/or professional community relating to your field. Academia is heavily dependent upon networking informally and formally, in the latter case through professional associations and conferences. You should try and establish your own informal networks, and participate in the professional ones, e.g. the postgraduate sections of professional associations. Such networking will bring you into contact with others in the same field, help to prevent isolation, offer you opportunities to attend conferences and give papers, and finally enable you to acquire skills which will stand...
you in good stead in your career, inside or outside academia (see for example Blaxter et al. 1998* pp 55–77). Again, your supervisors can help with contacts and advise on professional association memberships, etc.

Last, but by no means least, you should, from the beginning of your research studentship, be conscious of the need to develop skills and plan for your future career. Your primary objective as a research student is, of course, to gain a research degree, and this will be valuable in seeking employment. But, in today's labour market, you also need to have the key – transferable – skills which are demanded by employers. You should use the Personal Development Plan (PDP) in your ePortfolio to highlight areas of strengths and areas for improvement by mapping your current skills against the Researcher Development Framework developed by Vitae. 

https://www.vitae.ac.uk/researchers-professional-development/about-the-vitae-researcher-development-framework

You can learn about the skills demanded by employers, as early as possible in your studentship, by attending training and development events organized by the University's Careers Service see which can be used as a benchmark against which you can develop them over the course of your programme. See: http://www.ncl.ac.uk/careers/

So, at the start of your programme, you should look at the list and see which skills you have acquired already and which you will need to acquire over the remainder of your studentship. You should then check out which of these skills you will acquire in the course of your research training programme -they should be listed in the programme handbook – and discuss with your supervisors the other skills that you will acquire by undertaking your research. You should then audit your skills and identify any gaps – a common one for research students particularly in the humanities and social sciences is team-working – and make plans to fill them. Your supervisors will be of assistance in this regard, as will the postgraduate adviser in the Careers Service.

While all of the key skills are important, it is worth highlighting the acquisition of one in particular, namely effective oral presentation skills. Such skills are vital in the academic context (a number of schools/institutes ask research students to make oral presentations as part of their procedures for progression and of course you need them to make presentations to seminars and conferences) and for employment in virtually any field. You should take every opportunity to develop these skills through your faculty training programme, by reading the relevant literature (e.g. Cryer 2000) and by asking your supervisors or other colleagues to listen to a mini-presentation and give you feedback.

As well as actually acquiring skills for employment, you also need to be able to document their acquisition. This can be done on ePortfolio. Either way, if you can demonstrate to employers that you have acquired the appropriate skills, this will greatly enhance your chances of gaining the good job, which you deserve for all of the work and effort you have put in over the course of your research degree.

**Reviewing Practice**

Have you discussed possible opportunities for publications with your supervisors? Have you taken steps to establish informal networks in your subject community? Have you
joined the relevant subject associations? Have you attended Careers Service events on career planning and development? Have you reviewed your skills against the University's template? Have you made efforts to fill any gaps?

**Conclusions**

Research degrees are unique in so far as, rather than working within a pre-established framework, you often have to create and always undertake and manage a project to its conclusion. This is not an easy task but, in so far as your research will advance and/or contribute to the sum of knowledge and understanding in your subject, a worthwhile one. Hopefully these guidelines have helped to unpack what you need to do to succeed in gaining a research degree, given you indicators of good practice, and assisted you to reflect upon your effectiveness as a research student.

**References**

Atkins, D. (1996*). A Student Perspective, Supervision of Research Students: Centre for Educational Development and Academic Methods, ANU.
Newcastle University Handbook for Examiners of Research Degrees
Good Practice in Research Supervision

Introduction

Research supervision has been characterized by Brown and Atkins (1988, p 115) as
‘...probably the most complex and subtle form of teaching in which we engage. It is not
enough for us to be competent researchers ourselves – although this is vital. We need
to be able to reflect upon research practices and analyse the knowledge techniques
and methods which make them effective. But there is a step even beyond this. We have
to be skilled in enabling our research students to acquire those techniques and
methods themselves without stultifying or warping their own intellectual development.
In short, to be an effective research supervisor, you need to be an effective researcher
and an effective supervisor.’

As a member of the academic staff at Newcastle, you will be an effective researcher; the
aim of these guidelines is to assist you to reflect on good practice in supervising research
students. The guidelines are not intended to be prescriptive nor exhaustive, just to indicate
what, within the literature, has been identified as good practice. But some of the matters
covered do relate to University requirements, and this document should be read in
conjunction with the University’s Code of Practice for Research Degree Programmes, and the
Guidelines for Research Students and Research Supervisors, which sets out the formal
framework for research supervision.

The guidelines attempt to set out good practice in relation to fifteen key components of
research supervision, namely:
1. Establishing and maintaining a professional relationship with the student
2. Helping to induct them into research
3. Where appropriate, assisting with the choice of a topic
4. Where appropriate, helping them devise a research proposal and plan
5. Supporting the initial stages of the research project
6. Encouraging students to write
7. Assisting with academic problems with the research
8. Assisting with personal and social problems affecting the research
9. Giving feedback and reviewing the progress of the research project
10. Monitoring the progress of the research
11. Advising on drafts of the thesis
12. Advising on submission
13. Assisting on preparation for examination
14. Assisting with career development, networking, and publication
15. Working with Supervisory Teams

1. Establishing and Maintaining a Professional Relationship with the Research
Student

The relationship between a supervisor and a research student is a professional one, and it
is vital that it is started off on an appropriate footing. As Delamont et al. (1997, p 14) have
put it:
‘You need to sort out a good working relationship with your supervisee. Relationships
have to be worked at and discussed, because most of the later problems stem from a
Newcastle University approaches this by requiring supervisors and students to sign a learning agreement setting out the expectations of each other, as in the example below.

The **research student** agrees to:

- turn up on time for supervisions and give as much notice as possible of cancellations
- be properly prepared
- write regularly and share the draft materials
- maintain the highest standards of academic conduct, as set out in section 14 of the *Guidelines for Research Students and Supervisors*
- maintain contact
- undertake the tasks agreed to the best of their ability within the allotted time

The **research supervisors** agrees to:

- hold regular supervisions and give as much notice as possible of cancellations
- read work submitted promptly
- give written feedback.

**Both** agree to:

- treat supervision in a business-like way with an agenda
- keep records of supervisions detailing what was discussed, what targets were agreed, and when they were to be achieved by.

In general terms, supervisory support can include:

- Assistance with the choice of topic;
- Critical and constructive feedback on the work produced;
- Advice on the sources or literature used;
- Guidance on the methodology or techniques used and the approach to data collection;
- Discussion of evidence and results;
- Reading drafts and commenting on issues of substance.

Supervisors will not:

- Undertake the actual research itself;
- Write or significantly redraft papers or chapters;
- Conduct a detailed proof read the thesis.

At this stage also, you may wish to make it clear in what circumstances you would or would not expect credit to be given in any publications arising from the research.

While this process of establishing a professional relationship is important for all students, it may be particularly helpful to international students, who may have culturally defined notions of what they can expect from their supervisors. As Ryan (2000, p: 69) has put it:
Newcastle University approaches this by requiring supervisors and students to sign a

Both

The

The

were agreed, and when they were to be achieved by.

Supervisors will not:

not expect credit to be given in any publications arising from the research.

At this stage also, you may wish to make it clear in what circumstances you would or would

maintain contact

maintain the highest standards of academic conduct, as set out in

section 14 of the

Guidelines for Research Students and Supervisors

agrees to:

assistance with the choice of topic;

critical and constructive feedback on the work produced;

guidance on the sources or literature used;

discussion of evidence and results;

reading drafts and commenting on issues of substance.

undertake the actual research itself;

write or significantly redraft papers or chapters;

conduct a detailed proof read the thesis.

By these means, clear expectations should be established for what is to come at the start

of the research. But, as with any relationship, the supervisor-supervisee one changes, or

should change, over time. Ideally, it should start as a master/mistress-apprentice

relationship and end up as almost equal colleagues.

Clearly, this implies a process of development over the course of the supervision from the

supervisors playing a directive role and setting tasks for the student to do at the start

towards encouraging the student to become an autonomous researcher and increasingly

recognizing their capacity to make an independent contribution to knowledge and

understanding in the subject. However, as Cryer (2000, pp 5-7) has pointed out, this does

not happen automatically. Students may need to be weaned away from dependence upon

their supervisors, while the latter may need to adjust to the idea of the student

abandoning the nest and beginning to fly on their own. So, it is important for supervisors to

periodically check where the balance lies, whether it is appropriate for this stage of the

research, and if not, what can be done to correct it.

Reflecting on Practice

What methods do you use to establish a professional relationship with the student at

the start of the programme? What is the appropriate balance between dependence and

independence over the course of the programme? How often do you review that

balance? What can you do if it is wrong?

2. Inducting Students into Research

Many students coming through to research will have undertaken short research projects

either as undergraduates or as postgraduates, and will be required to undertake training in

research during their first year of study. There is also now a substantial literature on

undertaking a research degree to which students can be directed; examples include Cryer

(2000), Leonard (2001), Phillips and Pugh (2000), and Wisker (2001). However, while

previous experience and the literature yield insights into research, they may not prepare

students for it fully, in five respects.

Firstly, students are often still not fully aware of what they are letting themselves in for, i.e.
a research degree. Again, the point is well made by one of the PhD students interviewed by
Delamont et al. (1997, p 16):
'A lot of mistakes I've made are the result of not asking questions and people not putting me right. They presume I must know...I didn't know the PhD was meant to be an argument...[that] it's meant to say something. I thought it was one of those old-fashioned monographs, a collection of information. When I was an undergraduate I used to think a PhD was one of those articles you read in the journals, a 10,000 word article, I used to think they were PhDs.'

Clearly, if the student's supervisors have explained what a PhD was, pointed the student in the direction of a few successful theses, and discussed why they were successful, the mistakes which marred the student's experience could have been avoided.

The second way in which students may be unprepared for research stems from the way in which it is written up in books and papers in journals, namely as a seamless progression from initial idea to an addition to knowledge and understanding. But what is published is only the visible part of the iceberg; the other nine-tenths – the ideas that were discarded, the investigations that ended up in blind alleys, the correlations that were in the wrong direction, the experiments that gave negative results, the sheer fluke that led to the substantive advance – rarely see the light of day. So, it is scarcely surprising that many students expect their research to progress without incident and, when it does not, blame themselves.

Here, the supervisors have a key role in forewarning and forearming. This may take the form of directing students towards accounts of research as it really happened, pairing them with students further down the line to discuss the problems they had experienced, or even self-disclosure by the supervisors. What can be useful is for supervisors to keep all of the materials relating to a particular research project from first scribbles to final paper, and take the student through the process, disasters as well as triumphs. Such exercises can prepare them for what is to come, and can have the added bonus of demonstrating how to go about problem-solving in your subject.

Thirdly, students may not be aware or fully aware of what is entailed in maintaining the highest standards of academic conduct in undertaking their research, in particular with regard to the fabrication of results or plagiarism. A few minutes spent discussing this with the student can be helpful, and it is recommended that this is done.

Fourthly, Supervisors should spend some time at the start of the project discussing the storage and retention of research data with their students. Failure to store and retain data can, at worst, mean that experiments etc have to be replicated, at best that progress is halted until missing data is eventually found. In this context, it can also be useful to encourage students right from the start to take full references for everything that they read in such a form that they can later be easily transferred to the text or the bibliography of their thesis. Again, this can save many hours hunting for page numbers etc. at the writing-up stage.

Fifthly, the University supervisors responsible for ensuring that research students follow agreed University and, where appropriate, school health and safety policies and procedures, and these should also form part of the student's induction into research. Again, on international students, it is worth quoting Ryan, (2000, p 73):
'A common problem is that supervisors assume too much of student’s research knowledge. But some international students will have very little knowledge of how to conduct research....' Supervisors might consider going through one of the texts described above (e.g. Cryer 2000) with international students, and devising mini-research projects that contribute to the PhD that are designed to enhance their experience of research.

Reflecting on Practice
Do you ascertain at the start of the programme what the student knows about the degree they are about to embark upon? How to you make them aware? How do you alert the student to the trials and tribulations of research? How can you ensure that international students have an adequate induction into research?

3. Assisting with the Choice of a Topic
In many cases, and particularly in engineering and the sciences, students are often recruited to research a particular topic which has been pre-defined by a supervisor (see e.g. Delamont et al. (2000), Becher et al. (1994)). But, particularly in the arts, humanities and social sciences, students are recruited on the basis of their interest in working in a broadly defined area of the subject, which has to be narrowed down sooner or later to a specific topic.

Bright students who have sailed through their previous careers with effortless brilliance may have unrealistic expectations of what they can achieve in their research degrees. These can often be adjusted by asking them to look through the titles of MPhils or PhDs in their subjects which illustrate the narrowness of most (if not all) research topics. But even when they have abandoned seeking a cure for the common cold or a fundamental change in our interpretation of civilisation and adopted a more realistic project, they will still need help and guidance.

Moses (1992, pp 11-12) has characterized the process of selecting a topic as involving the five stages of (i) determining a general area of interest (ii) critically reviewing the literature (iii) identifying potential ‘triggers’ for projects (iv) evaluating their suitability, and (v) choosing at least a starting topic.

While the general area of interest should be known, supervisors can assist students by disclosure – talking through their own experiences – and/or exercises designed to model the rest of the process. Students can be asked to read (say) a review article (which can provide valuable training in critical evaluation) and asked to identify a couple of possible ‘triggers’ for research projects.

A supervision can then be devoted to discussing the key questions relating to suitability. Is this topic worth doing?; how, in principle, could it be done?; could it be done within the time available?; what additional knowledge and skills would be required to tackle it?; would it sustain interest?; if completed, how might it meet the requirements for the award? With, hopefully, an understanding of the criteria, students can then be asked to do this ‘for real’ and write brief reports, upon which supervisors can give oral or written
feedback. Eventually, this iterative process should lead to the identification of a topic which will, at least, form a focus for starting the research.

**Reflecting on Practice**

Do you provide students with a framework for choosing a topic? Would disclosure of your own experiences be helpful? Can you identify review papers in your subject which could be used to generate topics for exercises?

### 4. Producing the Research Proposal and Plan for Project Approval

It is a requirement of the University (*Code of Practice for Research Degree Programmes*) that research students should, in conjunction with their supervisors, produce and agree their research proposal and plan for formal project approval within the first three months of their research degree studies. The project proposal, plan and supervisory team will be considered by a school panel, and then the Head of School or nominee prior to formal approval by the Dean of Postgraduate Studies.

In some cases, particularly in science and engineering, research students are recruited to implement research proposals which have already been planned and scheduled. Nevertheless, in such cases a project plan and supervisory team list must still be submitted to the project approval panel to ensure that the project is achievable within the time-scales allowed and to confirm that sufficient resources are available within the school/institute.

Where the project is not pre-determined and planned for them, students need to manage their research projects actively. Otherwise, they can drift for months during the first year of research, and this is a major cause of drop out and also of non-completion within three or four years. Given the financial pressures on students – particularly international ones funded only for the stated duration of the programme – and of course Research Council sanctions on subjects with low completion rates within three or four years (see e.g. Joint *et al.* 2002), it is vital that they are clear about what they are doing and when they should be aiming to do it by. For these reasons, the University require supervisors should work with students to produce a research proposal and a plan.

With regard to developing the research proposal, supervisors can assist students by asking a fairly simple series of questions. For example: What is the topic?; Why is it important?; What have others written on it?; What would the research seek to add?; What method or methods would be useful in undertaking the research?; How could the research be designed?; How will data be collected?; How will it be analysed?; How, in principle, might results add to knowledge and understanding in this field? In addition, it is still useful to show students a good research proposal and take them through it step by step so that they have a clear exemplar to follow.

With regard to planning the research, in principle it seems simple enough to plot the tasks identified in the research proposal against time. In practice, of course, it is extremely difficult to predict in advance even approximately how long things are going to take, particularly if students have limited research experience, and the results can be over-optimistic to say the least.

Here, the supervisors should help students to appreciate the pitfalls of planning a research
project. One method for doing this has been developed by Delamont et al. (1997). Students are given Gantt charts for research projects in their subject which deliberately over-represent the time to be allotted for some aspects of the research process and under-represent the time needed for others. They are then asked to consider the realism or otherwise of these projections, to discuss them, and to re-plan the research. This technique can be extremely effective in stimulating students to think about the relationship between time and task and in enabling them to plan their own research.

Supervisors should also encourage students to revisit and update both their research proposal and plan frequently. Research topics can change markedly over the course of a project, and research plans need to be modified in response to this and other factors. Discussing and updating the research proposal and the research plan, will ensure that both supervisors and student are clear about where the research has got to, and what needs to be done to complete it.

Reflecting on Practice
Is there a good research proposal you could show to research students? Could you develop research plans for discussion with students?

5. Supporting the Initial Stages of the Research Project
Especially in disciplines where students have created their own research project, they are then faced with detailed preparatory work on the literature, the methodology, and the design of the research.

All of these can pose serious problems for students at the start of their projects. On the literature, students may need help in finding it if they are not familiar with the location of sources in the field, with learning how to read it critically, with note-taking, and with referencing. In some subjects, there are established and relatively less contested methodological approaches but in many subjects students are faced with a range of different potential approaches and may have to grapple with a range of difficult philosophical, theoretical, and empirical matters. In virtually all subjects, designing a major research project is a difficult exercise for the uninitiated, with each potential design associated with opportunities and limitations which can have profound implications for outcomes.

Such matters are dealt with in general through faculty research training programmes, and it is clearly important for supervisors to be aware of the content of these in ascertaining the support needs of their students. In addition, the supervisors still have a role to play in relating general features of literature evaluation, methodology, and research design to the student’s topic. For example, setting an exercise for students to find a key reference in their field, produce a critical review, evidence it from their notes, and cite sources correctly, can help them to evaluate the literature; pointing students in the direction of good discussions of methodologies in books, theses and papers in their topic area can assist with the adoption of a methodology; and asking for short briefing papers on the advantages and disadvantages of different designs can provide a basis for discussion and clarification of the options.

By these means, students can be supported through what can be the very difficult initial
stages of their research project. The avoidance of mistakes at this early stage, e.g. in the design of the research, can save much time and grief further down the line.

Reflecting on Practice
In what ways do the Faculty training programmes support students to acquire the necessary knowledge and skills in terms of evaluation of the literature, methodology and research design? How can you assist the student to acquire these in the context of their project?

6. Encouraging Students to Write
As students begin to make progress with their projects, they need to be encouraged to write as soon as possible, for four reasons. Firstly, it enables them to keep records of what they have done from the start to serve as a basis for later work. Secondly, it encourages them to reflect on what they have done so far and think about where they will go from here. Thirdly, it gives the supervisors the chance to see what has been done, and to advise them about how to proceed. Fourthly, it gets students into the discipline of academic writing at an early stage rather than leaving it until later when it is more difficult to acquire.

But, as most experienced supervisors will testify, students are frequently extremely reluctant to produce written work. Research (see e.g. Murray 2002) suggests that there are two major factors which constrain research students from writing. One relates primarily to lack of experience of writing regularly at all, of producing longish pieces of work, or of producing academic writing with its demands of precision, clarity, organization and explicit structure. The other factor is confidence. Whereas, as undergraduates or postgraduates on taught programmes, students outlined and discussed the work of other people, as research students their writing becomes, or should become, a presentation of their own views, ideas, thoughts, etc. This can leave students feeling very exposed and, particularly if their standard is published work, very dissatisfied with what they have achieved. For these reasons, they may be psychologically reluctant to write.

Supervisors can help students overcome these problems in a number of ways. With regard to writing regularly, Blaxter et al. (1996, pp 59-57) suggest that students should be encouraged to keep a research diary on a daily basis recording what they have done, time spent on it, analysis, and speculation. This gets students into the habit of writing regularly, recording, and reflecting, and gives them a basis upon which to construct larger pieces of work.

With regard to writing longer pieces, supervisors can help students to make the task more manageable. So, initially, they might request a one-page abstract of the chapter setting out its aim (purpose), content (what it would cover), and possible conclusions (what it would say). With that thought through and discussed, the next stage would be to ask for a synopsis fleshing out the abstract and setting out headings and sub-headings to be used. Then students can be encouraged to fill in the framework piece by piece until they have a draft chapter.

With regard to academic writing, students can be variously referred to books on the subject (e.g. Dunleavy (2003), (Murray 2002)), given examples of such writing from the literature in their field, or even paired with a mentor in the form of a student further on
with their research who will undertake to read drafts and suggest improvements. Supervisors can refer students to the University’s Writing Development Centre for further guidance and support [http://www.ncl.ac.uk/students/wdc/](http://www.ncl.ac.uk/students/wdc/)

In terms of overcoming psychological reluctance to write, supervisors can, as (Murray 2002) has suggested, reduce anxiety levels by giving the student explicit permission to submit a 'messy' draft for comment on the understanding that it will be treated as a first stab and not as the definitive submission. Further, it can be worth pointing out to students that virtually all contributions to knowledge and understanding start off as fairly rough-hewn stones which are then polished usually by several sets of hands before they become the perfect gems of publications. As suggested earlier, the message can be reinforced by showing students earlier drafts of supervisors’ own papers.

Again, here it is worth considering the particular problems faced by non-native speakers of English. To quote Ryan (2000, p 74):

‘Many international postgraduate students will have had very little experience in any kind of extended writing, and may have previously only been required to take lecture notes. They may therefore resort to an oral style, or may use writing styles that are favoured in their own country. [For example]...The use of proverbs, stories and literary illusions...are commonly used in Asian and African writing to demonstrate one’s educational level and accomplishment, to win the reader over to the author’s point of view, and to establish credibility. Classical sayings or poetic phrases will be used to make the writing look ‘well-educated’ and to establish empathy. The writing process takes a more circuitous approach, where the reader is gradually taken along a journey where the argument, or the main thesis, is only found at the very end. The thesis will begin by saying what the topic isn’t before writing about what it is.’

This, of course, is the antithesis of academic writing as practised in the West, and here there is a particular need to help international students to appreciate what is involved and help them to adjust.

By these means, supervisors can try to fulfil one of their principal responsibilities, encouraging students to write early and often.

---

**Reflecting on Practice**

Are your students writing early enough? Are they writing regularly enough? If not, how can you assist them to overcome the barriers to writing? How can you assist non-native English speaking students to improve their writing?

---

**7. Assisting with Academic Problems**

Research is, as argued earlier, an inherently difficult activity and it can almost be guaranteed that, at some point, students will be faced with problems. Such problems may include, for example, exploring the highways and the byways of the topic and drifting too far away from the original focus of the research, setbacks in collecting data, inconsistencies in findings, problems with the status of results – the list is endless.

The nature of intervention in such situations is a matter of fine judgement, but supervisors should try to suggest ways in which the student can, by their own efforts, resolve the crisis.
Again, there is a good example of such thinking in Delamont et al. (1997, p 77), in this case covering the familiar scenario where a research student has collected a vast amount of data and is unable to organize it in a coherent way, i.e. the student is ‘drowning in data’. Rather than leaving them to flounder or go out with the lifeboat, Delamont et al suggest that the supervisors should arrange for the student to prepare a seminar paper or write a working paper re-stating the central questions of the research, establishing what needs to be evidenced to answer them, and re-evaluating the contribution that the thesis will make to knowledge and understanding. This, they argue, provides an opportunity for students to re-focus the research, discard extraneous material, and hopefully avoid writing the ‘everything but the kitchen sink’ thesis which might be referred because of inadequate discrimination of evidence.

Reflecting on Practice
What sorts of academic problems are research students likely to come up against in your subject? In what ways do you think that you could help without compromising the independence of the research?

8. Assisting with Non-Academic Problems
Research students can experience non-academic problems which can affect their research. At Newcastle, academic supervisors are also personal tutors to their graduate students, and hence the role can extend to assisting with personal and social problems as well. Supervisors thus need to be equipped to deal with problems in the same way as for undergraduate tutees although it is worth noting that there are a number of additional arrangements to support students including a postgraduate tutor in each faculty. Of course, there are also a range of University services for postgraduate research students with which supervisors need to be familiar, and which are set out in Part One of this Handbook.

In addition to particular problems, it may be noted that one of the most consistent findings of the research literature on research students (see the summary in Delamont et al. 1997, p 96) is that they suffer, to a greater or lesser degree, from intellectual and social isolation. But, as the authors point out, while a degree of intellectual isolation is inherent in undertaking an original research project, ‘...there is no reason for this...to be accompanied by social or emotional loneliness’ and indeed this can be detrimental to the success of the research. So it is important for supervisors to ensure that there are opportunities for students to mix with others. These might include a regular postgraduate seminar, a postgraduate society, common development and training programmes, or participation in conferences or professional associations.

Again, in this context, it is worth stressing that particular consideration needs to be given to supporting international research students. They are more likely to feel socially and culturally isolated than home students, and they may find it more difficult for ask for support from supervisors or to make friends with fellow students. It is, as Ryan (2000 p 81) has argued, important to ensure that staff take an interest in the well-being of international students and assist them to join social networks. Also, where international students are accompanied by their families, consideration also needs to be given to...
involving spouses and children in social activities. They can feel marooned in an alien environment, and it is important to include them in school social activities and point them in the direction of relevant institutional societies and clubs.

Reflecting on Practice
What additional support is available to research students in your school, the faculty, and the University? Do you actively seek to encourage your research students to mix with others? Do you pay particular attention to the needs of international students and, where appropriate, their families?

9. Giving Feedback
Once students are writing and showing work in progress to you, you need to give them feedback. As Brown and Atkins (1988, pp 134-37) have pointed out, students need feedback for four main reasons, namely:

- to enable them to appreciate standards
Feedback gives the student a feeling for the standards against which their work will be judged. Students are unlikely at the start or in the early stages in particular to be fully aware of the standards that they are expected to attain (see Becher et al. 1994, p 134) and even reading successful theses in cognate areas may give them little indication of what to aim for at an intermediate stage of the research project. One of the key functions of the supervisors is to enable students to appreciate the standards which they are expected to attain. As Phillips and Pugh (2000, pp 23-24) have put it:

‘[Students] cannot get a PhD unless [they] know what the standards are... it is a vital responsibility of [the] supervisor to ensure that [they] are given every opportunity to become familiar with appropriate professional standards. It is only through this that [they] will be able to recognise and achieve them.’

Hopefully, as students learn from feedback, they should begin to internalize the standards and become able to assess their own work critically. This, of course, is part of becoming a successful researcher.

- to improve their skills
Feedback can also assist in developing students’ skills, including methodological skills (e.g. research design, data collection, data analysis, data interpretation) and writing skills. Students may or may not have the expertise to design and implement their research projects, and one of the functions of feedback is to advise on these matters and, in the case of shortfalls, assist the students to acquire relevant skills. Similarly, students’ skills in academic writing are likely to require development, and this is part of the function of feedback.

- to give them a sense of achievement
A further, and often neglected, reason for feedback is to give the student a sense of achievement. As Brown and Atkins (1988, p 136) have put it:

‘Students need to know that their work is valued and that their supervisors are genuinely interested in it.’

Being encouraged or praised is crucial to motivating students, particularly in the early stages of the project before (hopefully) success becomes apparent and becomes an internalized driver in itself.
• to deepen their understanding
The final reason is to assist students to deepen and develop their understanding of the problem or topic that they are researching through discussion at all of the stages from inception through to completed drafts.

But, if these objectives are to be achieved, feedback must be given in appropriate ways that will elicit a positive rather than a negative response from the student.

Suggestions include:
- thinking about an appropriate setting for the feedback
The setting for the feedback can have some bearing on how it is received. If you sit behind your desk with the student on the other side – particularly if they are on a lower level – then the signal is one of formal interaction between a superior and an inferior. If you are side by side in armchairs, the signal is more one of a discussion between colleagues.

- opening by setting out expectations for the session
It can be useful at the start to set out your expectations for the session. In particular, you should make it clear that the primary objective is to enable further progress in the research project (see Phillips and Pugh (2000, p 174)). It also can be helpful here to make it clear that, where appropriate, you will expect students to challenge your views and opinions, and that this is a normal and essential part of the process.

- summarizing your understanding of the material submitted
One of the most useful things that a supervisor can do is to summarize your understanding of the material that the student has submitted. ‘So, it seems to me that the central thrust of what you are saying is....’

- checking your understanding with the student
Once you have summarized, it can be very useful just to check that your understanding is the same as that of the student – ‘Have I got that right?’ This not only reassures students that you are taking their work seriously, but offers an opportunity to correct any misapprehensions at the start of the session.

- identifying the strengths of the work
You can then identify what you saw as the strengths of the work submitted, which is an opportunity for praise. ‘What I thought was really interesting was... what I most enjoyed reading was...’

- identifying the areas for attention
You can identify the areas for attention in ways that are constructive and positive rather than destructive and negative, e.g. 'why did you try to solve the problem using method X rather than method Y?' rather than 'Didn't you realise that you could have avoided these difficulties with method Y?'

- inviting the student to respond
Once you have identified the areas, then you can ask the student to respond. Here, it is very important that you allow the student to engage with the matters that you have raised, and in particular it must be recognized that they will need time to respond to queries about their work. You must also be prepared to listen carefully and check that the student has understood the point being made.

- summarizing the discussion
When the points have been exhausted, then it is important to summarise the discussion.
You may try to draw the threads together and then check it with the student or, alternatively, you may ask the student to summarize.

- maintaining a record

Finally, for the benefit of both the student and yourself, there should be an agreed written record. Normally, this would be written by the student, copied to you, if necessary amended, and then agreed jointly.

By extending the work of Partington et al. (1993, p 78) to the case of supervisor feedback, it can be said that you should avoid acting:

- as an inquisitor
  This supervisor behaves like a TV interviewer quizzing a politician during an election campaign, rapidly shooting out hostile questions, interrupting the answers, and generally trying to score points. Such an approach may intimidate the students so that he or she is unable to respond or anger them to the extent that the session becomes an adversarial confrontation.

- as a committee person
  The committee person takes the student through the material page by page questioning each matter as it arises rather than synthesising points into key issues relating to the research.

- as a hobby horse rider
  This supervisor has strong feelings or prejudices about one area of the submitted work and keeps returning to questions on this while neglecting other aspects of the research.

- as a kite flyer
  The kite-flyer has identified a – usually fairly tenuous – link between the work submitted and another subject and persists in exploring this to the detriment of the substance of the research.

- a reminiscer
  This supervisor continually regales the student with stories of their own research career to the detriment of feedback on the material submitted.

Reflecting on Practice

What arrangements do you make for ensuring that feedback to research students is prompt? How do you ensure that feedback is constructive? Do you maintain written records of feedback given to research students?

10. Monitoring Progress

Clearly, one of the key tasks of a student’s supervisors is to monitor the progress of the research project formally in accordance with University requirements.

With regard to monitoring progress with the student, the University requires that the academic/lead supervisor should hold a formal meeting at least 10 times per year, approximately monthly, with the student to review their progress and that the details should be recorded by the student on ePortfolio. At least 3 of these meetings each year should include the full supervisory team. All formal supervisions should be undertaken in a business-like way, with a date, time and agenda agreed with the student. Supervisors should ensure that, as far as possible, they should not be disturbed while they are meeting
with the student.

In addition to monitoring progress formally with the student, supervisors must submit an annual report on the student’s progress, as part of the student’s formal annual progress review on ePortfolio.

### Reflecting on Practice

Do you meet your research students approximately once per month to monitor their progress? Do you do this systematically? What school requirements are there for monitoring student progress? Do you meet the University’s requirements for annual monitoring?

### 11. Assisting Students to Complete

After students have persevered through academic and possibly personal problems and completed the basic research, they then enter a new tunnel called ‘writing up’ their thesis. While students may have conscientiously written up draft sections and chapters as they have gone along, they now face the task of putting it together as a whole and creating a thesis.

This would be easy if it were just a matter of throwing together what has already been written and adding linking sections, but demand rather more. As Barnes (cited Blaxter et al. (1996, p27)) has pointed out, ‘...a thesis is far more than a passive record of [the] research and generally involves presenting an argument or point of view. In other words it must say something and be substantiated with reasoned argument and evidence’.

Students can find it difficult to translate their work into a thesis, and here the supervisor may be able to assist by giving them a framework within which to work. One suggestion (see e.g. Cryer 2000, Taylor 2002) is to ask students to think of themselves as explorers who have undertaken a journey and who are writing a guidebook for others to follow.

As guides, they need to explain where they started from, what other guides they read, why they decided to undertake the journey at all, why they went off in a particular direction, what their route was subsequently, what they discovered on the way, where they arrived at the end of the journey, how it differed from the start, and where they would go in the future. They can be asked to map this on a few sides of paper, thinking carefully about what information must be imparted to enable someone to follow, what should be imparted, and what may be interesting but not strictly necessary.

Supervisors can then give feedback on the map, both on the overall clarity of the guidebook and upon the priorities assigned to particular stages in the journey. By this means, students can begin to construct a coherent outline of the thesis.

Once the general lines are clear, students can then be asked to fill in more details of sections of the journey, and then sub-sections until they have a detailed guidebook. This can then be translated into the structure for a thesis, e.g. starting point (introduction), existing guidebooks (literature review), reasons (triggers for the research), direction (methodology), route and discoveries on the way (substantive research chapters), arrival (analysis and results), difference from the starting point (contribution to knowledge) and
future (where research should go).

If, by these or other means, students can be assisted to establish a framework for their thesis, they then still have to write it. Here, supervisors can give guidance at least upon four key matters, namely communication, style, drafting, and managing the writing process.

A thesis is, of course, a form of communication, and it is necessary to consider in advance the audience to which it is addressed and how students might meet their needs. Here Cryer (2000, p 178) has some excellent advice which students can be given or pointed towards:

'The crucially important audience for theses are external examiners. Think of them as individuals who are exceptionally busy and grossly under-paid and who therefore have to read theses quickly. They will expect them to be well-structured and to be argued coherently to make the case for certain solutions to specific research problems. Irrelevancies will irritate, as will having to tease out meaning that research students should have extracted themselves. Think of them also as individuals who are very able and experienced in the general area, which means that the background material should be as concise as is consistent with showing that it is known. However, no external examiner can be an expert in your work. By the time you finalise your thesis, you and you alone are the world’s expert. So, the aspects that make your work significant and original and worthy of a PhD...need to be argued coherently; each step needs to be spelled out, the outcomes must be stated unambiguously, and all their implications identified and discussed in depth.'

With regard to style, it will of course be expected that the thesis is written up in 'academic writing', and it has already been suggested that students should be pointed towards the literature and to exemplars of the style appropriate to their work.

In terms of drafting, even with a framework, students can find this a daunting task. One way of assisting them is to encourage them to write their first draft 'as it comes', and then work with you to polish and re-polish it into its final form.

Again, this can pose a dilemma for supervisors in so far as there can be a fine line between helping the student clarify what they want to say and writing it for them. There is no simple solution to this dilemma, although it can sometimes be avoided by directing students to look at other work in which similar problems have been overcome.

In the context of advising on drafts, it is worth noting that the supervisors should not act as a proof reader and should make this clear to the student.

Last, but by no means least, students have to exercise a high degree of self-discipline to complete the thesis, particularly within a short period of time. It can be useful for supervisors to bring their students' attention to what Delamont et al. (1997, p 121) have described as the four 'golden rules' of writing, namely:

- the more they write, the easier it gets
- if they write every day, it becomes a habit
- tiny bits of writing add up to a lot of writing
- the longer they don’t write, the more difficult it is to get back in the habit.
Reflected on Practice
How do you help your students to translate their research materials into a thesis? What constitutes helping as opposed to writing it for students? Are there exemplars you can point students towards to assist their writing up?

12. Advising on Submission
The completion of the first serious draft is usually an immense relief for students. But it can be a major headache for supervisors, who need to advise students whether what they have done has the potential to meet the standards for the award, and if not what needs to be done to bring it up to scratch. Giving such advice to students can be particularly difficult at the start of a supervisor’s career, when their own experience may only be as an examinee and they are unsure about what is looked for by an examiner.

In such cases, the starting point for supervisors is to try to determine the criteria for success or failure. The assessment criteria for the relevant research degree are detailed in the University’s regulations for research degree and, where appropriate, in the individual research degree programme regulations. Once the criteria are reasonably clear, a supervisor can then read the draft and try to identify the strengths of the thesis (the area where the criteria are clearly met) and the weaknesses (those where criteria are not met). The latter can then be divided into weaknesses which are minor, major, or which constitute potentially fatal flaws. Again, here it is very useful to have a second opinion from other experienced colleagues on the supervisory team.

Once the diagnosis has been made and confirmed, then feedback can be given to students. It can be helpful to do this within the framework set out above – criteria, strengths, and weaknesses – before advising them how to proceed. If all has gone reasonably well earlier, there should not be fatal flaws (which would necessitate further research), but weaknesses to be corrected by re-drafting or textual amendments. Subject to these being made – and the supervisor should insist upon seeing successive drafts – the supervisor should be able to give the green light for submission.

Reflected on Practice
Do you know the criteria for the award of a research degree in your subject? What, in your view, would constitute minor weaknesses, major ones, and fatal flaws in a thesis?

13. Advising on Examination
At least three months before submission, the process of arranging the examination begins. Supervisors will propose examiners, usually one internal and one external, for formal nomination by the Head of School or nominee. It is important to consult the student about the appointment of examiners. The identification of an appropriate external examiner in particular can, as various studies (see for example: McWilliam et al. (2002); Mullins and Kiley (2002)) have shown, involve some heart-searching by supervisors; should they suggest Professor X who is a leading authority in the field but is known to be fiercely critical of the offerings of lesser mortals, or Dr Y who is less distinguished but more likely to take a balanced approach to examining the student’s work? The ideal is, of course, an external examiner who is distinguished and who will take a balanced approach, and if at all possible,
supervisors should suggest the names of examiners of this ilk.

With examiners formally appointed by the Dean of Postgraduate Studies and the thesis forwarded to them for scrutiny, the academic supervisor is responsible for arranging the date, time and place of the final examination, the viva.

Unless students have previously attended universities in which their awards were conditional upon an oral examination, the chances are that the examination for their research degree will be their first experience of an oral examination. This might be of little consequence if, as in many other European countries, the viva was a public affair and they could go along and experience what happened. However, this is rare in the UK, and for most students what goes on in the viva has, historically, been a mystery, one which has only recently become the subject of systematic research (see e.g. Tinkler and Jackson (2002)).

In the absence of hard information, tales of oral examinations being used to inflict unnaturally cruel punishment on research students abound with the result that, as Delamont et al. (1997, p 148) have put it:

‘The student may well fear and dread the [viva] examination. Even when the student is outstandingly competent, and however excellent the thesis may be, the process of examination is a stressful one...most [candidates] feel worried by the indeterminacy of the viva’

Here, the supervisors can play a role, in three main ways.
♦ Firstly, by de-mystifying the oral examination through explaining its purposes, procedures, and outcomes. In the case of Newcastle, these are set out in the University’s Handbook for the Examiners of Research Degrees and it can be helpful for supervisors to take students through the relevant parts.
♦ Secondly, by indicating what the student should do to prepare in terms of re-reading their thesis, keeping up to date with the literature, and preparing for questions.
♦ Thirdly, and perhaps most helpfully, supervisors can arrange for students to have a short mock oral examination in which colleagues who are experienced as examiners question them on a key part of their thesis and afterwards give feedback on their performance. Such an opportunity to ‘taste’ what is in store is invaluable in enabling students to prepare themselves both intellectually and psychologically for what is to come.

Reflecting on Practice

Do your research students have any previous experience of vivas? How do they feel about them? How can you help them to prepare?

14. Assisting with Career Development, Networking, and Publication

It is good practice for supervisors to assist students with career development, networking, and the publication of their work.

At one time, students undertaking a research degree, particularly a PhD, were destined predominantly for the groves of academe, and career development took the form of socializing them into the values and rituals of the relevant academic ‘tribe’ (see e.g.
Reflecting on Practice

or through directing students’ attention towards the relevant literature (e.g. Cryer (2000), acquire the necessary training, either as part of the faculty research training programme, or through directing students’ attention towards the relevant literature (e.g. Cryer (2000), and offering opportunities for students to give mini-presentations and receive feedback.

Under the heading of skills, supervisors also need to encourage students to record the skills that they acquire over the course of their research programme for later use as evidence to prospective employers. This can be done by the student in the ePortfolio record.

A second function of supervisors can be to encourage students to network within the subject community and to provide opportunities for them to do so. Academia is heavily dependent upon networking informally and formally, in the latter case through professional associations and conferences (see Blaxter et al. (1998, pp 55-77)). Students need to be encouraged to establish their own informal networks of academic colleagues in their subject areas, and to join in professional networks, e.g. the postgraduate sections of professional associations. This can be important for their research, as a counterweight to isolation, and in acquiring networking skills which will stand them in good stead in any career.

A third function of supervisors is, as soon as it is practical to do so, to encourage students to publish their work in scholarly journals. Publications, particularly those during the course of a research degree, can help variously to mark out their academic territory, bring them into contact with others working in the same field, boost their self-esteem, give them a better platform for applying for jobs and, last but not least, enhance school publication rates. But students do need guidance from their supervisors about how to write for publication, which journals or publishers to aim for, and how to go about submitting a paper or a book.

Research students’ writing for publications, of course, raises the issue of whose names should go on papers submitted to journals etc. Here, practice varies considerably between and within disciplines. In some the convention is that the supervisor’s name automatically goes on the paper as, if different, does the name of the person who has obtained the funding for the research. This can and does lead to friction if research students feel that they have done the vast majority of work for the paper but are effectively credited with an equal share of the authorship. This issue should be discussed openly with students, and one way around this which has been used in some subjects is to have a footnote indicating the relative contributions of the authors, say X the supervisor 20 per cent, and Y the research student 80 per cent.
Do you encourage students to think about career development at the start of their studentships? Do you encourage them to assemble an appropriate portfolio of skills for employment over the course of their studentship? Do you assist them to acquire effective presentation skills? Do you encourage students to network and provide opportunities for them to do so? Do you encourage students to publish? What is the relevant policy in your discipline for the attribution of authorship in publications?

15. Working with Supervisory Teams
The University adopts a team approach to supervision so you should expect to be part of supervisory teams of at least two members with the research skills and knowledge needed to supervise the research project. To become a member of such a supervisory team it is necessary to be on the approved supervisor list.

Different approaches may be adopted by the supervisory team. In joint supervision, the supervisory responsibilities are shared equally between members of the supervisory team. In other styles of supervision, members of the supervisory team may have different roles. There may be, for example, a lead supervisor and a co-supervisor responsible for a smaller element of the planned research; or a lead supervisor and an advisor responsible for, and able to deal with, general and pastoral responsibilities. In all instances one supervisor must be nominated as the academic supervisor and be responsible for the quality assurance aspects of the research degree e.g. sign off Project Approval and Annual Progress Review.

Members of supervisory teams are expected to discuss the role they adopt in the supervisory team. They should liaise regularly with each other and agree who will read and feedback on pieces of work supplied by the student. The research student is expected to stay in regular contact with both supervisors, and to discuss all aspects of their research with them. It is a requirement that the full supervisory team should meet with the student at least three times a year. More detail on supervisory teams is provided in the University’s ‘Code of Practice for Research Degree Programmes’.

Reflecting on Practice
Do you discuss the requirements for a research degree with your co-supervisor(s) at the start of the studentship? Do you discuss ways of resolving inter-disciplinary differences and giving consistent advice to students? Have you and your co-supervisor(s) clear ideas of who is responsible for what in supervising the student?

Conclusions
Being an effective researcher is a necessary condition to be a research supervisor, but it is not a sufficient one; the latter requires being an effective supervisor as well. That, in turn, involves unpacking what is involved in effectively supervising a research student, reflecting on practice, and improving it. Hopefully these Guidelines will at least give food for thought in encouraging supervisors to review their effectiveness.
Do you discuss the requirements for a research degree with your co-supervisor(s) at the start of the studentship? Do you discuss ways of resolving disciplinary differences? Do you ensure students are aware of their responsibilities? Are students asked to identify the attributes they need to have in order to do research? Do you discuss the needs of different students? If the research depends on the supervisory team, do you discuss the role of each member? Do you clarify who is responsible for what in supervising the student? Do you encourage supervisors to review their effectiveness.

Conclusions

Being an effective researcher is a necessary condition to be a research supervisor, but it is not a sufficient one; the latter requires being an effective supervisor as well. That, in turn, involves unpacking what is involved in effectively supervising a research student, reflecting on practice, and improving it. Hopefully these Guidelines will at least give food for thought in encouraging supervisors to review their effectiveness.

References


PART FOUR - ACADEMIC MATTERS: REGULATIONS, POLICIES AND PROCEDURES

The University has a range of regulations, policies and procedures, which exist for the purpose of protecting and supporting the highest standards within the University and PGR students are encouraged to be familiar with their existence. These are subject to annual review and the complete versions are always available from the University’s website, but key points of relevant policies and/or procedures are highlighted below.

Postgraduate Research Regulations
The University has Postgraduate Research regulations covering both the candidature and the examination of your programme, which are reviewed on an annual basis. You should ensure that you familiarize yourself with these regulations as they provide the overarching rules for your studies and examination at Newcastle University. The regulations should be read in conjunction with the Code of Practice for Research Degree Programmes (Section Two of this handbook). If your programme contains taught elements, you should also familiarise yourself with any programme specific regulations.

If you have any queries regarding the regulations, you should contact your supervisor(s), or the relevant Graduate School Administrator. The regulations are available at: http://www.ncl.ac.uk/regulations/docs/

Student Procedures
Student policies and procedures, which are applicable to all students are available at: http://www.ncl.ac.uk/students/progress/Regulations/

In particular, you should be aware of:
- Student Charter
- Academic Query and Appeals Procedure
- Student Complaint and Resolution Procedure
- Living in the Community
- Maternity Policy
- Standards of Personal Conduct (including Fitness to Study Procedure and Student Disciplinary Procedure)

University Handbook for Examiners of Research Degrees by Theses
The University is responsible for the quality and standards of postgraduate research awards made in its name. The function of examiners is to assist the University to discharge that responsibility by ensuring that the standards of postgraduate research awards at Newcastle are at least comparable to those in similar subjects in other Universities in the UK. The University expects that examiners will be rigorous and fair and that they will follow good practice. By undertaking their duties in this way, examiners not only maintain standards at Newcastle but, of course, also act as effective gatekeepers for the research
community of which they are a part by ensuring candidates meet the academic criteria for membership. The Handbook covers Doctoral and Master of Philosophy research degrees and focuses on the examination of the thesis.

Additional guidance is provided in the appendices at the end of the Handbook for the examination of Integrated PhD programmes, Professional and Practice-based Doctorates.

The Handbook for Examiners of Research Degrees by Theses is available at: http://www.ncl.ac.uk/students/progress/assets/documents/Examinerhandbook1718.pdf

Further information on the Research Degree Examination procedure and forms is available at: http://www.ncl.ac.uk/students/progress/assets/documents/Examinerhandbook1718.pdf

**Standards of Academic Conduct**

The University requires all students to maintain high standards of academic conduct and, in particular, to avoid conduct amounting to cheating in examinations, the fabrication of research results or plagiarism.

Cheating in examinations includes: copying from or conferring with other candidates; the possession or use of unauthorized material or equipment; and the impersonation of an examination candidate. Candidates who knowingly permit themselves to be impersonated, or their work to be copied, will be regarded as cheating. Any student suspected of having cheated in examinations will be dealt with under the University's Assessment Irregularities Procedure and may also be subject to disciplinary action as determined by the Academic Registrar in accordance with the University's Disciplinary Procedures approved by Council.

The fabrication of research results includes: claims, which cannot reasonably be justified, to have obtained specific or general results; false claims in relation to experiments, interviews, procedures or any other research activity; and the omission of statements in relation to data, results, experiments, interviews or procedures, where such omission cannot reasonably be justified. Any student who is suspected of having fabricated research results in relation to submitted and assessed work which contributes to an examination or degree result, will be dealt with under the University's Assessment Irregularities Procedure and may also be subject to disciplinary action as determined by the Academic Registrar in accordance with the University's Disciplinary Procedures.

Plagiarism is the unacknowledged use of another person's ideas, words or work. At one extreme, plagiarism is simply a form of cheating, such as where the whole or a significant part of work submitted towards an examination or degree is the unacknowledged work of another, copied slavishly from a book or research paper. At the other extreme, plagiarism may occur accidentally, through poor standards of scholarship, or may concern insignificant parts of submitted work. Plagiarism may involve the use of material downloaded from electronic sources such as the Internet.

Students are sometimes unclear as to what use may be made of the work of others in the field without raising concerns about plagiarism. Any student who is in doubt on this matter should consult his or her tutor or supervisor. In most cases, the adoption of appropriate
standards of scholarship will avoid any such concerns. The following general guidelines may assist:

1. Passages copied verbatim from the work of another must be enclosed in quotation marks. A full reference to the original source must be provided. The substitution of a few words in an otherwise verbatim passage will not obviate the need to use quotation marks and to provide a full reference.

2. Students must always give due acknowledgement to the sources of ideas or data which are not their own and are not truly in the public domain (for example, because they are novel or controversial) or are not widely held or widely recognized.

3. Ideas and data which are the student’s own or are truly in the public domain may be included without attribution, but should be expressed in the student’s own words.

4. Students must take care to distinguish between their own ideas or work and those of others. Any ambiguity in such a distinction could give rise to a suspicion of plagiarism. Further guidance can be found at the following web site: http://www.ncl.ac.uk/right-cite/

5. Where the student’s work is the result of collaborative research, the student must take care to acknowledge the source of data, analysis or procedures which are not their own.

Students who are suspected of having made the unacknowledged use of another person’s ideas, words or work in submitted and assessed work which contributes to an examination or degree result, will be dealt with under the University's Assessment Irregularities Procedure and may also be subject to disciplinary action as determined by the Academic Registrar in accordance with the University's Disciplinary Procedures.

**Code of Good Practice in Research**

The University expects all its staff and students to adhere to the highest standards of integrity in research. This statement addresses the issues involved in the proper conduct of research and provides guidance on the standards expected. It applies to all Researchers (defined here as all staff, honorary staff, students and visiting workers undertaking research within or on behalf of the University). Student research misconduct will be dealt with via the student disciplinary procedures, and staff research misconduct via the Policy and Procedure for Investigating Allegations of Research Misconduct.

Within this overarching framework there may be specific discipline requirements in areas such as ethics, clinical governance, data protection, legal requirements, Home Office and other government requirements, in addition to health and safety and other good laboratory practice requirements. Some disciplines may also be subject to specific good practice requirements of external funding agencies or professional bodies.

The University has signed up to the Concordat to Support the Career Development of Researchers (http://www.ncl.ac.uk/hr/concordat/index.php) which governs working practices, roles and responsibilities of research staff.

The full code is available at: http://www.ncl.ac.uk/research/ethics/goodpractice/
Dignity and Respect Procedure

Introduction

The University is unequivocally committed to the goal of fostering mutual respect and understanding between individuals and within its constituent communities and to promoting equality of opportunity among employees and students alike. The University aims to promote a working and learning environment and culture in which differences are tolerated, harassment and bullying are known to be unacceptable and where individuals have the confidence to deal with harassment and bullying without fear of victimisation. This procedure aims to ensure that if harassment or bullying does occur employees, students or visitors have support and adequate procedures to deal with the problem.

The University undertakes to:

- Treat incidents of harassment or bullying as serious;
- Publicise the procedure as widely as possible in order to ensure that all employees and students are aware of its existence;
- Include information in employee induction and appropriate staff development sessions (e.g. awareness training);
- Monitor the number of cases arising and the effectiveness of the procedure.

Rights and Responsibilities

All Employees and Students

Everyone has a responsibility to comply with this procedure and all staff and students should ensure that their behaviour towards colleagues does not cause offence and could not be considered harassment or bullying.

Differences in culture, attitudes and experience, or the misinterpretation of social signals, can mean that what is perceived by the person experiencing the behaviour as harassment and/or bullying, may be perceived by others as normal. It is important to be sensitive to the feelings and reactions of others. Consider the appropriateness of your behaviour and the affect it has on others and be prepared to adjust it if necessary.

Line Managers and Supervisors

Those responsible for the management of employees or the supervision of students should:

- Set a good example by treating employees and students with dignity and respect.
- Understand the Procedure and make every effort to ensure that harassment and bullying do not occur, particularly in work or study areas for which they are responsible.
- Respond sensitively and supportively to any employee or student who makes an allegation of harassment or bullying; provide clear advice on the procedure to be adopted; maintain confidentiality in accordance with this Procedure; monitor the work and study environment to ensure that there are no problems of harassment or bullying, or of victimisation after a complaint has been made.
• Be alert to unacceptable behaviour and take appropriate action; do not wait until complaints are brought to your attention if you are aware of behaviour of other managers, employees or students which might cause offence. If the incident is not serious then calling the individual aside and providing some advice may be sufficient to stop the behaviour.

• Ensure that employees and students know how to raise problems, are aware of the Procedure and sources of help and support.

The full Policy on Dignity at Work and Study is available at: http://www.ncl.ac.uk/hr/assets/documents/dignity_and_respect_procedure_mar_2016-et.pdf

Equality Strategy

Purpose

The Equality Strategy is our public declaration of our commitment to develop a fully inclusive University community which recruits and retains talented staff and students from all sectors of society equally. It also sets out how we, at Newcastle University, plan to meet the duties placed on us by equality and diversity legislation and to follow best practice in all that we do: including employing our staff, providing teaching and learning to our students and being engaged with local communities.

Context

Our Vision is of Newcastle as a Civic University with a global reputation for academic excellence. Our Mission is: to be a world-class research-intensive university; to deliver teaching and facilitate learning of the highest quality and to play a leading role in the economic, social and cultural development of the North East of England. There are certain fundamental values shared throughout the higher education sector to which we are committed, including: academic freedom; the pursuit of knowledge and understanding; a sound academic disciplinary base; a methodology based on reason and evidence; social responsibility; and transparency. In addition, we are committed to excellence; value diversity; respond to societal challenges; accord parity of esteem to research and teaching; educate for life; are globally ambitious and regionally rooted and invest in excellent staff.

Arising from the three elements of the mission statement, we have three core academic functions: research and innovation; learning, teaching and the wider student experience; and engagement and internationalisation. As a university, our institutional objectives are: to achieve: top 20 in the UK for research; top 20 in the UK for student satisfaction; a focus on three societal challenge themes (ageing, social renewal and sustainability); a significant international, national and regional profile and reputation; and financial and environmental sustainability.

Commitment to Equality and Diversity

Our Equality and Diversity commitment is to develop a fully inclusive University community which recruits and retains staff and students from all sectors of society. We will nurture them, ensuring that they can be developed within a positive and supportive culture that encourages everyone to flourish and reach their potential. We will build strong positive
relationships between staff, students and external stakeholders (including contractors and visitors) and promote a common vision where diversity is valued by all. Everyone must be treated with dignity and respect. We can identify how Equality and Diversity are relevant to and will assist us to achieve our core academic objectives.

The full policy is available at: 
http://www.ncl.ac.uk/diversity/publications/equalitystrategy.php

**Policy and Procedure on Public Interest Disclosure**

The University is committed to the highest standards of openness, probity and accountability. It seeks to conduct its affairs in a responsible manner taking into account the requirements of the funding bodies, the standards in public life set out in the reports of the Nolan Committee, and the principles of academic freedom embodied in its Statutes.

The Public Interest Disclosure Act, which came into effect on 1 January 1999, gives legal protection to workers against being dismissed or penalized by their employers as a result of disclosing in the public interest certain serious concerns. It is a fundamental term of every contract of employment that an employee will faithfully serve his or her employer and not disclose confidential information about the employer’s affairs. However, an individual within the organization should have the right to disclose certain matters of public interest without fear of reprisal. The Enterprise and Regulatory Reform Act 2013 confirmed that the legal framework that gives protection to workers who raise public interest disclosures is intended to apply only to disclosures that are made in the broader public interest, as opposed to issues in which an individual may have a personal interest.

This policy and procedure is intended to guide and assist workers and students who wish to make a disclosure, in the public interest, about what they believe to be malpractice or impropriety in order to assist the University in the maintenance of appropriate standards of propriety and good practice. Workers and students are expected to use this policy and procedure in the first instance rather than report their concerns to a third party outside the Institution. Whilst the law recognises that in some circumstances it may be appropriate for workers to report their concerns to an external body such as a regulator, the University strongly encourages workers and students to seek advice from an appropriate manager or Students’ Union Officer before reporting a concern to anyone external.

The full policy is available at: 
https://my.ncl.ac.uk/staff/assets/documents/PolicyandProcedureonPublicInterestDisclosur e.pdf

**Policy for Intellectual Property and Research Studentships**

Where supervisors believe that a project involving a student or an academic visitor is likely to generate potentially commercialisable IP, they should note carefully the position outlined below.

Intellectual Property generated by members of staff in the University is automatically vested in the University, provided that it relates to work that the member of staff would
Normally be expected to carry out as part of their day-to-day activities. However, undergraduate and research postgraduate students and academic visitors are not members of staff, and there may be considerable variation in the nature and source of their funding. This note explains the IPR position of different types of studentships. It details where positive action is taken by University Research Office (URO) to protect IP and identifies where schools need themselves to take specific action.

Where a student or a visitor is joining a large research effort with considerable and possibly highly commercialisable IP, supervisors must ensure that the IP position is reviewed immediately with the student, that the student is aware of the position with regard to IP, that he or she understands the problems that will arise for the University should the IP associated with a project be disclosed prematurely, and that the IP generated in the course of the grant is properly vested in the University in exchange for an undertaking to treat the student as if he or she were a member of academic staff with regard to intellectual property. A corollary of this is that where the student has clearly been responsible for 'inventive' steps in the prosecution of his or her research, and that research has led to a patent being filed by the University, the student's name shall appear on the patent.

Policy Statement on Confidentiality and Intellectual Property (including Inventions) and Results for Research Students, is available at: [http://www.ncl.ac.uk/res/assets/documents/PGRPolicyv10111114FINALClean.pdf](http://www.ncl.ac.uk/res/assets/documents/PGRPolicyv10111114FINALClean.pdf)

Further general guidance about Intellectual Property is available from the University Research Office: [http://www.ncl.ac.uk/res/resources/Polices%20Forms%20and%20Guidance/Policies.htm](http://www.ncl.ac.uk/res/resources/Polices%20Forms%20and%20Guidance/Policies.htm)

**Copyright Licence Agreement**

This institution has a Licence with the Copyright Licensing Agency Limited to enable students and members of staff to copy extracts, within clearly defined limits (set out below) from books, journals and periodicals published in the United Kingdom, Australia, Canada (including Quebec), Denmark, Finland, France, Germany, Greece, Iceland, The Netherlands, New Zealand, Norway, Republic of Ireland, South Africa, Spain, Sweden, Switzerland and by some publishers in the United States of America*.

**What the Licence covers**

The Licence permits the copying of extracts (whether the pages copied consist of text or graphics or are a combination of text and graphics) from most books, journals and periodicals published in the UK (and in the other Mandating Territories shown above), with the specific exception of those belonging to one of the categories of material defined in the next section.

The basic permission to photocopy extends to the copying (from paper on to paper) of:
- up to 5 per cent or one complete chapter (whichever is the greater) from a book;
- up to 5 per cent or one whole article (whichever is the greater) from a single issue of a journal;
- up to 5 per cent or one paper (whichever is the greater) from a set of conference proceedings;
• up to 5 per cent of an anthology of short stories or poems or one short story or one poem of not more than 10 pages (whichever is the greater);
• up to 5 per cent or one single case (whichever is the greater) from a published report of judicial proceedings.

**What the Licence does not cover**
The following Excluded Material is outside the scope of this Licence Agreement:
- printed music (including the words)
- bibles, liturgical works, orders of service
- maps, charts, or books of tables
- newspapers
- public examination papers
- industrial house journals
- workbooks, work cards and assignments
- 'copying not allowed under the CLA licence' titles
- private documents (fee-based tuition)
- works included on the Excluded Works list
- works published by non-participating US publishers
- works published outside Mandating Territories

**Policy on Postgraduates Who Teach**
This policy covers teaching and learning practices for postgraduates teaching or demonstrating on modules. Appointment practices, employment terms and conditions are covered in more detail by separate Human Resources policies. This policy does not cover arrangements for hourly paid bought in teaching.

The University recognises the value to postgraduates of the teaching experience it provides, and is committed to providing such opportunities consistent with its desire to deliver teaching of the highest quality on its programmes.

Postgraduates may support teaching by:
- Taking small groups such as seminars, tutorials or workshops
- Helping with fieldwork
- Demonstrating in laboratories
- Providing occasional lectures on their own specialism
- Assessment under the conditions indicated in this document.

Further information can be found in the Policy on Postgraduates Who Teach at: http://www.ncl.ac.uk/ltds/assets/documents/qsh-pgswhteach-pol.pdf