PART FOUR

Academic Matters

University Guidelines and Policies for Research

Here you will find Guidelines and Best Practice advice for research supervisors and research students. In addition to providing what is hoped to be comprehensive guidance, each section ends with an opportunity for Reviewing Practice for those who feel they may benefit from it.

All the Guidelines featured here are important and you are encouraged to look carefully at them.

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Newcastle University Code of Practice for Research Degree Programmes

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.
  - 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.
  - 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. 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 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.

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 ePortfolio 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 ePortfolio.

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. 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
- determining if an Intellectual Property Rights or a Confidentiality agreement is required
- promoting awareness of ethical and professional requirements for the conduct of research and ensuring that ethical approval is obtained for the research, where appropriate
- being the first point of contact in the supervisory team for the University and ensuring that any relevant paperwork relating to the student e.g. extensions, interruptions is properly processed and recorded providing pastoral support and guidance to the student and acting as a signpost to University central services
- offering support to students in their personal and career development
- arranging together with the Head of School/Institute or nominee a replacement supervisor where one of the supervisory team is absent
- arranging and co-ordinating the final examination

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 ePortofolio
- 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 a 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 (Handbook for Research Students and Research Supervisors (part four)) 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 re-convene 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 eg. 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:
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, as defined in The Framework for Higher Education Qualifications in England, Wales and Northern Ireland (2008).

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 focussing on aspects of this Code of Practice.

121. The Annual Review reports are supplemented by an Audit Visit; within each Faculty two visits to Schools/Institutes take place per year. The audit 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 Audit 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/quilt/resources/research/

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 of the complaints and resolution procedure are set out in the Handbook for Research Supervisors and Students given to all research students and on the University’s Web site (see http://www.ncl.ac.uk/students/progress/staff-resources/pg-research/handbook.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 of the academic appeals and query procedure are set out in the Handbook for Research Supervisors and Students and on the University Web site (see http://www.ncl.ac.uk/students/progress/staff-resources/pg-research/handbook.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 successfully complete the project;
- 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. But 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.

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. **Research Degree Programme**

   This aspect of your ePortfolio will include a research proposal and plan, and records of your supervisory meetings and Annual Progress Reviews. It is also important that you are aware of regulations and formalities regarding your research degree programme.

2.1 **Research Proposal**

   In your first couple of months on your research programme you will need to work on the development of a research proposal with guidance from your appointed supervisors. If your research proposal has already been developed prior to your recruitment and has been agreed and/or funded by a research sponsor/funding body, then it may not require much further development. However, as an approved project is one of the requirements for confirmation of candidature and progression on the research programme, approval for all research projects needs to take place as soon as possible after starting at the University and within 3 months of initial registration.

   The Research Project Approval form is available for use on your ePortfolio. Section One should be completed by you with the following evidence submitted in order that the project can be considered.

   - a research proposal;
   - a research plan;

   *These can be attached as documents or can be completed on the form.*

   You must also indicate whether your project requires Ethical Approval.
The University Ethics form is available at: https://newcastle-ethics.limequery.com/index.php/survey/index/sid/865378/newtest/Y/lang/en. The form works in two parts. You must answer ‘Part 1 – Preliminary Questions’ to establish if your project requires further ethical approval. If you do require further ethical review from a Newcastle committee, you will be asked to complete and provide further information in ‘Part 2 – Further Details’.

Once Section one has been completed on the form, the academic supervisor will identify an appropriate supervisory team, provide a supporting statement and pass the proposal to a school panel.

It should be noted that, where a project proposal has already been reviewed and approved by external peer review, a project plan and supervisory team list must still be submitted to the panel for approval before being submitted for approval by the Dean of Postgraduate Studies. This is to ensure that the project is achievable within the time-scales allowed and to confirm that sufficient resources are available within your school/institute. If there are any modifications to your proposal, please keep a record of these changes. It is your responsibility to ensure that you have an approved research proposal.

2.2 Research Plan and Supervisory Meetings

Your research plan should be updated on a regular basis as discussed and agreed with your supervisory team. It is your responsibility to ensure that your research project is completed on time. Regular structured contact with your supervisory team to discuss academic and personal progress will help you to meet your targets. (The University requires that you 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. At least three of these meetings each year should include the full supervisory team.) Throughout your studies, you will be monitored by your supervisory team; and you will be required to keep a record of formal supervisory meetings on ePortfolio.

Keep a record of your research plan with progress updates and supervisory meetings in your ePortfolio.

2.3. Annual Progress Reviews

Each student will have a formal annual assessment/review by a Progress Panel, who will submit a progress report to the Dean of Postgraduate Studies for approval. Timescales for annual progress reviews will vary depending on your Faculty; but will follow a similar format described later (section 3.3). Assessments will involve one or more of the following: a written progress report, a project presentation and viva by the panel, or an open presentation with critical feedback. Please consult your School/Institute Handbook on the requirements for your Annual Progress Reviews. The Progress Panel will assess evidence and decide whether suitable progress indicates your research project will meet the standards of the award in the time allowed. If necessary, action may be taken and another review date set.

Your annual progress report must be made on ePortfolio with all evidence electronically attached. Keep a record of your research programme assessment presentations, formal meetings and feedback in your Portfolio.
3. **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 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.)

3.1 **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.

### 3.2 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

3.3 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.

4. 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

Introduction

The purpose of these guidelines including: a Summary of Newcastle Practice; and Good Practice for Research Students, is to outline Newcastle’s practice and expectations of Research Degree Students, and provide a more general indication of good practice for student’s on managing their doctoral studies.

Summary of Newcastle Practice

1. These Guidelines describe the essential elements of student-supervisor, student/University relationships and detail the minimum requirements that a student will be expected to comply with during his/her programme of work.

2. At the commencement of your proposed programme of work, you must have a detailed discussion with your supervisors. You need to have received, understood, and accepted the expectations of your research programme. Following this discussion a formal Learning Agreement should be signed by the student and by the academic supervisor or supervisors. The Learning Agreement can be found at the following web site:
http://www.ncl.ac.uk/students/progress/assets/documents/LearningAgreement.pdf. A copy of the signed Learning Agreement must be sent to your Graduate School Administrator within one month of registering on your programme, so that completion can be recorded on your student record. You should ensure that the meeting takes place and that following points are covered in the discussion:

(a) the scope of your proposed programme of work and an initial definition of the subject of study with particular emphasis on:

(i) the importance of completing the programme in the time available;

(ii) the standard of work that will be expected from you (you would be well advised to read successful theses available in the Library as a guide to what is expected);

This should form the basis of your project proposal, which will need to be approved before your Candidature is confirmed

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

(c) any programme of training and guidance in research methods, again recorded in your ePortfolio;

(d) 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;

(e) good practice in relation to the storage and retention of research data;

(f) constraints, other than time, which may affect your 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 with your lead supervisor and supervisory team to monitor your progress 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 your research is in progress and the possibility of presenting work at meetings of learned societies and/or of submitting it for publication directly.

(j) If your studentship has any formal sponsorship you must discuss with your supervisors the terms and conditions relating to such sponsorship, and ensure that you understand them.

3. You will be expected to maintain regular contact with your supervisors, to seek their advice on the planning of your work and other matters including the use of suitable techniques. You will also be required to present written work as appropriate. It will also be your responsibility to raise any problems and difficulties you think should be drawn to the attention of your supervisors. This includes any factors – domestic, social, financial or health factors – which you believe may have an effect upon your progress.
4. Your progress on the programme will be formally monitored through annual reports (note that programmes with an initial taught component (eg Integrated PhD, Professional Doctorates) will have alternative monitoring arrangements, at least initially). Supervisory teams will monitor progress and report to an independent school progress panel, which will use evidence from a variety of sources to determine whether each individual student’s progress is satisfactory for the award in the time available.

5. Approximately once a month you will have a formal meeting with your supervisors to review progress. You are required to record and maintain records of these supervisory meetings in your ePortfolio.

6. Students should also submit a project proposal for approval on ePortfolio and this should also 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 field work or study abroad 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)

7. 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 University Regulations at:
   [http://www.ncl.ac.uk/regulations/docs/2016.html](http://www.ncl.ac.uk/regulations/docs/2016.html)

8. Each year your supervisors will be required to submit an annual report on the progress of your work. This report will take into account the review requirements as detailed by your school/institute.

9. Each year you will also be required to submit an annual report on your progress and evidence of achievement as specified by your school. You will be asked to complete your progress form on ePortfolio. Information on progression can be found on the following webpage:
   [http://www.ncl.ac.uk/students/progress/student-resources/PGR/KeyActsAPR.htm](http://www.ncl.ac.uk/students/progress/student-resources/PGR/KeyActsAPR.htm)

As part of this process you will be required to produce at least one substantial piece of work (e.g. literature review, experimental write-up), in order to help assess your ability to proceed successfully through your programme. You may be required to make a presentation of this work to other staff and/or students.

10. The report form you submit will be forwarded to a school progress panel, which will consider the evidence, including the annual report from your 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 on ePortfolio, 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 wish to provide to you and the supervisory team, 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.

11. If at any stage throughout the period of study you feel that the standard of supervision that you are receiving is inadequate or that you are unable to establish an effective working relationship with one of your supervisors, and it has not proved possible to resolve these difficulties in discussion with your Supervisors, School Director of Postgraduate Studies/ Tutor or Head of School. You should inform the relevant Graduate School Administrator or Dean of Postgraduate Studies for advice and mediation. You may also consult directly with the Graduate School Administrator, your Faculty’s Postgraduate Tutor or Dean of Postgraduate Studies in confidence, without delay. The annual progress review, also provides you with an opportunity for you to raise any issues. If there are any issue you wish to discuss, but you do wish to put this information in to your progression report, you should consult with the relevant Graduate School Administrator in confidence for advice.

12. You are 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 and the Code of Good Practice in Research, later in this part of the Handbook. 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) You may be unclear as to what use may be made of the work of others in the field without raising concerns about plagiarism. If you are in doubt on
this matter, you should consult your supervisors. In most cases, the adoption of appropriate standards of scholarship will avoid such concerns. The following general guidelines may assist you (further guidance is provided on the right-cite web page [http://www.ncl.ac.uk/right-cite](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) you must always give due acknowledgment to the sources of ideas or data which are not yours and are not truly in the public domain (for example, because they are novel or controversial) or are not widely accepted or widely recognized;

(iii) ideas and data which are your own or are truly in the public domain may be included without attribution, but should be expressed in your own words;

(iv) you must take care to distinguish between your own ideas or work and those of others. Any ambiguity in such a distinction could give rise to a suspicion of plagiarism;

(v) where your work is the result of collaborative research, you must take care to acknowledge the source of data, analysis or procedures which are not your own.

13. The retention of accurate and contemporaneous records of primary experimental data and results is of the utmost importance for the progress of academic enquiry. You 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 your work that might arise at a later date. Such questions can arise during the course of subsequent investigations by you, your 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 you cannot provide an accurate record of the primary data. It is important that you and your work should be protected from such misunderstanding.

The following guidelines will assist you 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.

(e) 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.

(f) 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.

14. Your supervisors will advise you on the manuscript of your 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 your responsibility to revise the manuscript and to decide when to submit the thesis.

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 - Summary of Newcastle Practice section, 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. Procedures for dealing with this eventuality are set out in Paragraph 11 of this
section of the University's *Guidelines for Research Students Summary of Newcastle Practice*.

**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? Do you have arrangements for regularly reviewing your relationship with your supervisors?

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/](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 to 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 Two 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,
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 terms of data and results, particularly in experimental research, it is of the utmost importance that these are recorded and maintained in such a way that they can vouch for the accuracy and authenticity of your research. You must read, and follow to the letter, the University's requirements for the retention and storage of data as set out in Section 11 of its Guidelines for Research Students.

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 (Code of Practice for Research Degree Programmes and Guidelines for Research Students, Section 2) 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:
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</td>
</tr>
<tr>
<td></td>
<td></td>
<td>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</td>
<td>Full research design</td>
</tr>
<tr>
<td>8</td>
<td>Preparation of pilot study (if relevant)</td>
<td></td>
</tr>
</tbody>
</table>
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, Para 4) 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, insessional English language courses are available, which can provide support with your academic writing in English.

http://www.ncl.ac.uk/students/insessional/

<table>
<thead>
<tr>
<th>Reviewing Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>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?</td>
</tr>
</tbody>
</table>
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
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.

### Reflecting 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 successfully make the 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 Two 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 (see Part Two).

As well as self-reviewing, the University requires (Guidelines for Research Students, Para 5) 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 it 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 discoveries</td>
<td>Substantive research chapters</td>
</tr>
<tr>
<td>Arrival</td>
<td>Analysis and results</td>
</tr>
<tr>
<td>Differences</td>
<td>Added knowledge</td>
</tr>
<tr>
<td>Future</td>
<td>Directions of research</td>
</tr>
</tbody>
</table>

11. 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>% of thesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
</tr>
<tr>
<td>Literature review</td>
</tr>
<tr>
<td>Methodology</td>
</tr>
<tr>
<td>Research findings</td>
</tr>
<tr>
<td>Discussion</td>
</tr>
<tr>
<td>Conclusions</td>
</tr>
<tr>
<td>Bibliography</td>
</tr>
</tbody>
</table>

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 – the part of this Handbook which sets out the criteria which they 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.

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 (Research Student Handbook, Part 4 ‘What to do when your research nears completion …’ provides guidance).

<table>
<thead>
<tr>
<th>Reviewing Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>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?</td>
</tr>
</tbody>
</table>

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, 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 may be, the process of examination is a stressful one...most [candidates] feel worried by the indeterminacy of [the viva]*.

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

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 teamwork — 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 have to often 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 successfully gain 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.
Guidelines for Supervisors of Research Students

Introduction

The purpose of these guidelines: Summary of Newcastle Practice; and Good Practice guidance for the Supervisors of Research Student, is to provide an outline of Newcastle’s practice and expectations of supervisors of Research Students and a summary of more general good practice for supervisors supervising doctoral students.

Summary of Newcastle Practice

1. These Guidelines provide a summary of the practices for supervisors of research students expected by Newcastle University.

2. 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.

3. At the commencement of the proposed research programme students will have a formal induction. Supervisors will have a detailed discussion with the student at the outset of their studies. The student needs to have received, understood, and accepted the expectations of the research programme. Following this discussion a formal Learning Agreement should be signed by the student and by the supervisors. The Learning Agreement can be found at the following web site:

www.ncl.ac.uk/students/progress/student-resources/PGR/KeyActsLA.htm

A copy of the signed Learning Agreement must be sent to your Graduate School Administrator so that completion can be recorded on the student’s record. The details of this discussion should be recorded by the supervisors and a copy given to the student. It should normally cover:

(a) the scope of the proposed programme of work and an initial definition of the subject of study with particular emphasis on:
   (i) the importance of completing the programme in the time available;
   (ii) the standard of work expected (students should be referred to successful theses in the Library as a guide as to what is expected of them);

   this should form the basis of the project proposal which will need to be submitted for approval within the first three months of the student’s studies.

(b) the overall timetable for the planning and completion of the programme of work including any programme of training and guidance in research methods, any period of preliminary reading, and the writing of the thesis. This should be recorded in the student’s Personal Development Plan (PDP) within their 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. In particular, the student’s attention should be drawn to the statement in paragraph 12 of the Guidelines for Research Students – Summary of Newcastle Practice concerning standards of academic conduct. Appropriate guidance should be given to enable the student to avoid any possible concern about plagiarism or the fabrication of research results;

(d) good practice in relation to the storage and retention of research data;

(e) constraints, other than time, which may affect the programme of work, such as costs and the need to design and build equipment and deal with any ethical concerns; (f) an initial consideration of potential issues of confidentiality or intellectual property;

(g) a preliminary discussion should be held addressing the practicality of any field work and whether there are any constraints or dangers;

(h) a programme of regular meetings between the supervisors and the student to monitor progress on the research and if appropriate 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 learned societies and/or submitting it for publication directly.

4. The supervisors should maintain regular contact with the student and should give advice on the planning of work and on other matters, including the use of suitable techniques. They should request written work as appropriate and make constructive comments on it. The supervisors should, during the year, require the student to produce at least one substantial piece of work (e.g., literature review, experimental write-up), in order to help assess his/her ability to proceed successfully through the subsequent years of his/her research programme. The student may be required to make a presentation of this work to other staff and/or students.

5. A record of the student's progress should be kept in ePortfolio and approximately once a month formal meetings with the student should be held to review progress. There should normally be three meetings during the year with the full supervisory team. Students are required to record and maintain records of these formal supervisory meetings in their ePortfolio.

6. Students are required to submit a project proposal for approval by a school panel within the first three months of their studies. Progression on the programme will be dependent upon acceptance of the project proposal by the Dean of Postgraduate Studies.

7. Students registered for the degree of Doctor of Philosophy will have their registration for a doctoral award confirmed provided 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 University Regulations at [http://www.ncl.ac.uk/regulations/docs/2016.html](http://www.ncl.ac.uk/regulations/docs/2016.html).

8. Each year the supervisors must submit an annual report on the progress of the student's programme of work to the school progress panel. This report should take into account the review procedures detailed in paragraphs 4 to 5 above. This must be done on ePortfolio.

9. Each year the student shall also submit an annual report on his/her progress and evidence of achievement as specified by the school /Institute to a school progress panel on ePortfolio.

10. The Report Forms will be forwarded to a school progress panel which will consider the evidence and determine whether progress indicates that the research project will meet the standards for the award. The Progress Panel will make a report on ePortfolio, 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 wish to provide the supervisory team and the student, the Progress Panel will make one of the following recommendations:

1. That the candidate’s performance is satisfactory and that 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 should continue or upgrade to study for the Doctor of Philosophy;

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.

11. If at any stage throughout the period of study the supervisors feel that the progress of the student is unsatisfactory or that the standard of work generally is below that expected, they should inform the 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 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.

13. The supervisors should advise on the manuscript of the thesis in general and on content, presentation and organization. They should not act as a proof reader and should make this clear to the student. They should read all of the first draft and thereafter continue to offer advice. It must be made clear to the student that it is his/her responsibility to revise the thesis manuscript and to decide when it is ready for submission. The section on Supervisory Support in the University’s Code of Practice for Research Degree Programmes, provides clear guidance on what supervisory support can include and what it does not.

NOTE ON HEALTH AND SAFETY

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 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 the Supervisors of Research Students, 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 co-supervisors
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 failure to set out the expectations both parties have for the relationship. A few supervisions devoted to discussing the best ways to work together will not be wasted.’

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.

<table>
<thead>
<tr>
<th>The research student agrees to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ turn up on time for supervisions and give as much notice as possible of cancellations</td>
</tr>
<tr>
<td>♦ be properly prepared</td>
</tr>
<tr>
<td>♦ write regularly and share the draft materials</td>
</tr>
<tr>
<td>♦ maintain the highest standards of academic conduct, as set out in paragraph 12 of the University’s Guidelines for Research Students - Summary of Newcastle Practice</td>
</tr>
<tr>
<td>♦ maintain contact</td>
</tr>
<tr>
<td>♦ undertake the tasks agreed to the best of their ability within the allotted time</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The research supervisors agrees to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ hold regular supervisions and give as much notice as possible of cancellations</td>
</tr>
<tr>
<td>♦ read work submitted promptly</td>
</tr>
<tr>
<td>♦ give written feedback.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Both agree to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ treat supervision in a business-like way with an agenda</td>
</tr>
<tr>
<td>♦ keep records of supervisions detailing what was discussed, what targets were agreed, and when they were to be achieved by.</td>
</tr>
</tbody>
</table>

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:

‘...international students...are likely to expect a hierarchical relationship with their supervisor where the supervisor exercises tight control over the research. Many international students will expect their supervisor to take the initiative and adapt a role close to being a guide and/or parent. They may expect the supervisor to make major contributions towards the research and the thesis. They will be expecting clear direction and guidance from their supervisors, whom they will hold in great esteem, and they often have very high expectations of the relationship.’

In such cases, it can be useful to spend some time discussing student's expectations of the roles of the supervisors and of what you can offer in order to clarify the relationship. Such discussions should emphasise the additional support available to international students in the early stages of their research (see below), as well as the need for them to take the initiative in undertaking and completing the research project.

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 (see University Guidelines for Supervisors of Research Students 3(a) (ii)), 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 Section 12 of the University's Guidelines for Research Students-Summary of Newcastle University Practice with the student can be helpful, and it is recommended that this be done in the comparable Guidelines for Supervisors (3(c)).

Fourthly, the Guidelines for Supervisors (3(d)) also recommend that supervisors 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 (Guidelines for Supervisors, p 3) makes 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 and Guidelines for Research Students, Section 2) 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 actively manage their research projects. 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’s Guidelines for Supervisors (3(a)) 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 frequently revisit and update both their research proposal and plan. 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/

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 in a coherent way, i.e. the student is ‘drowning in data’. Rather than leaving them to flounder or going 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.
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 elsewhere in 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.

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 critically assess their own work. 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 (Guidelines for Supervisors, 5). 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 University's Guidelines for research supervisors (paragraph 13) state that 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.

### Reflecting 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.

### Reflecting 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. Delamont et al. (2000)). But it is no longer the case that successful research students necessarily become academics – a majority do not – and even those who do follow an academic career require a wider portfolio of skills. Part of the job of a supervisor is, from the very start of the studentship, to encourage the student to actively acquire the key skills necessary to give them an edge in the labour market.

While all skills are important, it is perhaps worth highlighting one, namely the need to encourage research students to acquire the skills to give effective oral presentations because such skills are vital in an academic context. It is important to ensure that students 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.

Reflecting on Practice
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’:

http://www.ncl.ac.uk/students/progress/assets/documents/PGRCoP.pdf

### 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.

### References


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University Handbook for Examiners of Research Degrees by Theses

Introduction
The University is, of course, 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. This Handbook covers Doctoral and Master of Philosophy research degrees i.e. the degrees of MPhil, MD and PhD etc 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 the Integrated PhD programmes, and professional and practice-based Doctorates in the Arts and Humanities and Engineering.

For further information on the Research Degree Examination procedure and forms see: http://www.ncl.ac.uk/students/progress/staff-resources/pg-research/exam.htm

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D) Additional Information for Examiners of Theses Submitted in Partial Fulfilment of the Doctorate of Clinical Psychology
E) Additional Information for Examiners of Theses Submitted in Partial Fulfilment of the Engineering Doctorate in the Schools of CEAM and CIVG
1. The Nomination and Appointment of Examiners

1.1 Nomination of Examiners

Candidates for postgraduate research degrees must complete the minimum period of registration required for the award and formally submit the exact title of their thesis for approval to the relevant Dean of Postgraduate Studies, normally not less than three months before they intend to submit it.

At the same time as the title is submitted, the Head of School/Institute in which the candidate is studying will nominate examiners for the thesis, via ePortfolio. Heads of School/Institute will consult supervisors about nominations. In the case of student candidates, heads should nominate one external and one internal examiner who is not the candidate's supervisor. In exceptional cases where the University is unable to appoint an internal examiner, a second external examiner will be appointed.

When making nominations, Heads of School/Institute, in consultation with supervisors, will, take account of the criteria for the appointment of examiners in the University’s Code of Practice for Research Degree Students
http://www.ncl.ac.uk/students/progress/assets/documents/PGRCoP.pdf

They will also present evidence that nominees fulfil these criteria. e.g. a short CV and a list of recent publications,

1.2 Independent Chair (where required)

Where two external examiners are appointed, or where the internal examiner has no previous experience of examining doctoral degrees, the relevant Dean of Postgraduate Studies will also appoint an independent member of University staff who will chair the oral examination.

Where the relevant Dean of Postgraduate Studies has determined that an independent chair is required, normally the independent chair should be from outside the candidate's school/institute.

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.

The Independent Chair will be present for the duration of the oral examination, normally 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 the conduct of the oral examination to the Graduate School Administrator following the oral examination.

1.3 Appointment of Examiners

Examiners are appointed by the relevant Dean of Postgraduate Studies on behalf of Senate. Following appointment examiners are sent:

♦ the terms and conditions of appointment, along with an abstract of the thesis to be examined
♦ the University's Handbook for Examiners of Research Degrees
♦ a copy of the work submitted by the candidate in fulfilment of the
requirements for the award
♦ a copy of the University's Regulations and Examination Conventions governing the relevant research degree
♦ Information about the programme, if relevant
♦ examination report forms

2. Duties of Examiners of Research Degrees by Theses

The core duties of examiners for research degrees are:
♦ carefully to consider the written work submitted by candidates
♦ to arrive at an independent evaluation of whether the work submitted meets the standards of the award and, if not, in which aspects it is deficient
♦ to write an independent preliminary report and send it to the Graduate School Administrator for forwarding to the relevant Dean of Postgraduate Studies, in advance of the oral examination taking place (where one is required)
♦ to consult with the co-examiner and compare independent preliminary reports, after both independent reports have been submitted to the Graduate School Administrator
♦ in the case of the MPhil research degree where oral examinations are optional, to decide if it is appropriate to use this means of determining a candidate's suitability for the award
♦ to agree with the supervisor a date and time for the oral examination
♦ to prepare for the oral examination in advance and compare independent preliminary reports with the co-examiner and agree an agenda for the examination
♦ to conduct the oral examination
♦ following examination of all written and, where appropriate, oral evidence, to decide whether the candidate has met the standards for the award
♦ to decide upon an appropriate recommendation to the relevant Dean of Postgraduate Studies (the full list of recommendations allowed under University regulations is set out later in this document)
♦ to complete a joint report form with the co-examiner on the candidate’s performance and submit it to the Graduate School Administrator.
♦ in all cases where the recommendation is that the thesis be revised before award or re-submission for the original or a lesser degree, to agree with the co-examiner a written statement providing a full list of the changes to be made and/or work to be undertaken. This forms part of the Examiners’ Joint Report, which shall be formally forwarded to the candidate and the supervisory team by the relevant Graduate School Administrator.
♦ in the case of external examiners, to comment upon any aspects of a candidate’s experience or the examination process which they have judged to be particularly good or which have raised problems. This should be forwarded to the Graduate School Administrator for forwarding to the relevant Dean of Postgraduate Studies.
In exceptional circumstances, and two or more weeks in advance of a scheduled oral examination, if the external examiner is unequivocally of the view that the thesis is not worthy of defence without significant rework, the external examiner should contact the Graduate School Administrator. The relevant Dean of Postgraduate Studies shall then request independent preliminary reports from each examiner before determining whether it is appropriate for extraordinary arrangements to be put in place for the examiners to confer before the scheduled meeting. If approved by the relevant Dean of Postgraduate Studies, the examiners will be permitted to prepare a joint report giving the candidate the recommendation of resubmitting in twelve months, with an oral examination at that time.

3. Examination Criteria

Doctoral Programmes

Doctoral degrees at Newcastle University are awarded to candidates that 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 critically explore, 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.

For examination of the Integrated PhD programmes, professional and practice-based Doctorates in the Arts and Humanities, please see the additional guidance at the end of the Handbook

MPhil programme

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.

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.

Normally an MPhil thesis will be more focused or limited in scope than a doctoral degree, which 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

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

- **Authentic**
  The submission should be the candidate’s own work and not plagiarized from the work of others, published or unpublished. All sources used should be appropriately acknowledged using a recognized form of referencing.

- **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.

- **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.

- **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.

4. **Good Practice in the Examination of Research Degrees by Theses**

The purpose of this section is to outline good practice in the examination of research degrees by thesis.

4.1 **Pre-examination**

Before reading the work submitted, examiners should consider the criteria against which to evaluate theses outlined in section 3. Such criteria are relevant to both individual chapters, and the thesis as a whole.
4.2 Relating the examination criteria to chapters of the work

While research degrees vary between individual subjects the following provides a general guide outlining what to consider.

- The context
  ♦ that the research question(s) have been placed in their academic and, where appropriate, industrial or commercial contexts
  ♦ that, in the case of a thesis undertaken as part of a team project, the relationship of the research to the overall project is set out along with the contribution of the candidate relative to that of other team members

- The literature
  ♦ that the relevant literature or an appropriately justified section of it has been covered
  ♦ that the literature is reviewed in ways which are critical and analytical and not just descriptive
  ♦ that the thesis demonstrates clear mastery of the literature
  ♦ that explicit links are made between the literature and the topic of the thesis
  ♦ that there are explicit links between the literature and the design of the study
  ♦ that there is a summary of the literature in so far as it relates to the thesis topic

- Methodology/methods
  ♦ that there is an awareness of the range of methodologies/methods which have been or might be used to tackle the topic
  ♦ that there is adequate justification of the methodology(ies)/methods adopted for the research
  ♦ that the methodology/methods are related to the design of the research
  ♦ that practical problems and issues are identified and discussed
  ♦ where applicable, that ethical considerations are outlined and discussed
  ♦ where applicable, that matters of reliability and validity are identified and discussed

- Design of the study
  ♦ that the design of the study is appropriate to the topic
  ♦ that there is awareness of the limitations of the design adopted

- Substantive research
  ♦ that the research design has been properly implemented
  ♦ that the relevant sources of evidence have been explored

- Analysis
  ♦ that appropriate theoretical and, where applicable, empirical techniques are used to analyse evidence
  ♦ that the level and form of analysis is appropriate to the evidence
- Outcomes/Results
  ♦ that the outcomes/results identified relate to the topic
  ♦ that the outcomes/results are justified on the basis of the analysis of the evidence
  ♦ that the outcomes/results are presented clearly
  ♦ where applicable, that patterns and trends in the outcomes/results are accurately identified and summarized

- Discussion
  ♦ that the main points emerging from the outcomes/results have been picked up for discussion
  ♦ that there is an awareness of the limitations of the outcomes/results

- Conclusions
  ♦ that the conclusions relate to the initial focus of the study
  ♦ that the conclusions drawn are justified by the study
  ♦ that the implications of the conclusions for the field of knowledge have been identified

4.3 Examination of Written Work

While it is good practice for all examiners to have the examination criteria in mind prior to reading the thesis, it is recognized that different examiners may adopt different approaches to reading the work. What follows below are suggestions which will assist those new to examining.

♦ Start by gaining an overall impression of the substance of the thesis or dissertation
  Examiners can start by reading the full title, the abstract, and the introduction and then turn to the final chapter(s) to see what conclusions were reached. This should enable them to gain an overall impression of what the thesis is about and what has come out of it.

♦ Reflect on and relate the examination criteria to sections of the thesis
  Examiners may then reflect and consider how the criteria relating to the thesis (section 3 above) might be applied to the topic in question, e.g. the literature the candidate might be expected to have read, which methods would be appropriate, etc. etc. By the end of this examiners should have effectively translated the examination criteria into a set of clearly-defined questions to be asked of the specific piece of work before them. In addition, their reflection may have led to new questions about the research.

♦ Read and note
  Examiners can then carefully read each chapter of the thesis or dissertation with the relevant questions in mind. They can note where questions have been answered satisfactorily, where clarification is needed, and where answers are not satisfactory. As, in the course of reading, additional questions occur, these may be noted and views recorded on how well the candidate has answered them in the present chapter or in subsequent ones.
Reflect and summarise
Examiners should now have a clear idea of how far each section of the thesis meets the relevant criteria. These may be summarized to identify the strengths and weaknesses of the thesis and to highlight issues where clarification is required.

Consider whether the thesis meets the general criteria
In the process of reading the thesis section by section, examiners will have begun to formulate an impression of how it meets the more general criteria concerning authenticity, scholarship, and structure, presentation and citation (section 3 above). They may now consider how far the work meets these criteria and note where the work does fulfil them, where there is doubt, and where they are not met. This may involve re-reading all or part of the thesis and would normally include checking a sample of citations.

Consider whether the criteria for the award have been met
The last area for consideration is whether the thesis meets the award specific criteria. It can be helpful here for examiners to refresh their memory of the University's regulations, in particular in the case of the PhD to consider the definition of originality. Again examiners should note in what respects the thesis meets the criteria, where this is unclear, and where it does not meet them.

If examiners follow the above, they should have notes on the extent to which the criteria are met for sections of the thesis, the latter as a whole, and in relation to the award. These notes should form a basis for writing a preliminary report.

4.4 The Preliminary Report
Examiners should then independently write a preliminary report, which will indicate their provisional assessment of the thesis and of the issues to be explored in the oral examination. The University recognises that these reports will vary considerably depending upon the discipline and the subject matter of the thesis. It would normally expect that, if the criteria have clearly been fully met, the report will normally be very brief. On the other hand, if examiners have serious doubts or concerns about whether criteria have been met, a fuller account would be expected.

A copy of the preliminary report should be sent to the Graduate School Administrator in advance of the oral examination (normally two weeks) for forwarding to the relevant Dean of Postgraduate Studies. The preliminary report should not be shown to the candidate or supervisor.

4.5 Oral Examination
The purpose of the oral examination is to gather further evidence from the candidate about their suitability for the award, in particular:

- to ask the candidate to clarify issues relating to meeting criteria relating to specific parts of the thesis, to the thesis as a whole, and to the award
- to ascertain that the thesis is the candidate’s own work, that he or she has developed research skills at this level, and that he or she understands the relationship of the thesis to the wider field of knowledge
• in cases where the thesis and/or the candidate for the award clearly does not meet the criteria, to find out the reasons. These may include the abilities of the candidate or other factors affecting the research, e.g. deficiencies in research training, the quality of supervision, the availability of resources, disruptions to the research process, or personal circumstances

4.6 Guidelines for an oral examination to be conducted by video link or equivalent audio visual service

It is expected that all oral examinations will take place with both the candidate and examiners present at the University unless specifically requested otherwise. Video link or an equivalent audio visual service may be used in exceptional circumstances where either the candidate or one of the examiners is not able to be present at the University.

In order for an oral examination to be conducted in this way approval must be sought from the dean of postgraduate studies and approval will only be given where the integrity of the examination can be guaranteed. The guidelines listed below must be adhered to.

• In all cases it should be voluntary for candidates to participate in oral examinations conducted in this way and written consent should be obtained from them (this consent could be in the form of an email).
• A member of the supervisory team or internal adviser is not normally expected to be present unless at the specific request of the candidate, but is expected to be available to be contacted by the examiners or candidate (after the examination) if required, for example by telephone.
• Any time difference between the two locations should be taken into account and the timing of the examination planned to ensure that the candidate is not disadvantaged in any way by it taking place at an inappropriate time.
• Guidance should be provided to those involved regarding how many hours both the facilities and the people involved (student, academic staff and technical staff) will be required for.
• Skype is not considered reliable enough or of high enough quality for use during an oral examination and high quality video conferencing facilities should be used. Advice on Videoconferencing facilities should be obtained from the IT Service [http://www.ncl.ac.uk/itservice/videoconferencing/](http://www.ncl.ac.uk/itservice/videoconferencing/) Oral examinations can last for an entire day and therefore the technology needs to be able to facilitate this if necessary.
• Wherever possible the distance location used should belong to a ‘trusted partner’ e.g. the British Council.
• An opportunity should be provided in advance for those involved to trial the technology ahead of the examination.
• The examination should not be recorded.
• The candidate and examiners must be able to see each other at all times during the examination.
• Any materials brought into the examination by the candidate must be declared and be visible to the examiners at all times.
• An Independent Chair should be appointed to ensure that all parties are given sufficient opportunity to speak.
• Technical support should be available to those involved at all times.
4.7 Preparing for the Oral Examination

It is normally the supervisor who arranges the date, time and place of the oral examination. The supervisor should normally be available for consultation if necessary prior to and after the oral examination although they are not normally present (except in cases where the student has requested their presence but they will make no contribution to the examination).

Examiners should have a meeting, in strictest confidence and out of range of the candidate or other students, normally a couple of hours before the oral examination, to exchange and discuss preliminary reports. Examiners should then, bearing in mind each other's comments upon the written work, jointly determine:

♦ the key issues to be raised with the candidate
  These will be those identified in the initial reports where clarification is required or where criteria have not been met.

♦ the order within which they are to be raised
  In order to encourage candidates to talk, it can be helpful to raise relatively uncontroversial/factual issues at the start and then proceed to ones which are likely to be more difficult/conceptual when he or she is in the swing of things.

♦ who will 'lead' on each issue
  Examiners usually decide upon a division of labour based upon their expertise in the topic, with one leading on each issue and the other asking supplementary questions.
  Normally, the external examiner chairs the proceedings and has overall responsibility for conducting the oral examination, unless an independent chair has been appointed.

4.8 Good practice in conducting the oral examination:

In the oral examination it is important to:

♦ provide a quiet space for the candidate to prepare themselves for the oral examination
  Candidates should be provided with a quiet space, out of range of any preliminary discussions between the examiners and/or supervisor.

♦ ensure that the room is appropriately laid-out
  The oral examination is a formal occasion, and the room should be appropriately laid out.

♦ introduce the examiners to the candidate
  It is courteous to the candidate for the chair of the examiners to introduce him- or herself and the other examiner(s) to the candidate.

♦ explain the purpose of the oral examination to the candidate
  It can be useful to explain to candidates that the purpose of the oral examination is to provide them with the opportunity to defend their thesis in high-level debate with experts drawn from the relevant research community...
- **explain the process of the oral examination to the candidate**

As many candidates will not have previously undertaken an oral examination, it is important to explain the process to them. This involves the examiners asking questions about their work and supplementary questions based upon their answers.

The chair should make it clear that the examiners have a duty to thoroughly explore both the work presented and the candidate's knowledge and understanding of both it and the wider field and that persistent questioning is a normal and necessary part of the process.

If he or she wishes, the chair should also say that no information about recommendations will be given until the examiners have conferred after the end of the oral examination but make it clear that this again is part of the process and that no inferences should be drawn.

The candidate should also be told that he or she may, if they wish, consult with their copy of the thesis throughout the oral examination.

Where an independent chair has been appointed they should make it clear that their role is to chair the oral examination, and to ensure the University's procedures with regard to the examination of research degrees are followed and that the examination process is conducted fairly and equitably. They take no part in the assessment process.

- **start the oral examination by commending the candidate**

Candidates can be extremely nervous, and it is important to try and settle them down at the start of the oral examination by saying something commendatory but non-committal, e.g. 'We found your thesis very interesting', 'we particularly enjoyed...'.

- **question the candidate**

Examiners should then start the questions. Normally, the external examiner begins the questions, and he or she should choose ones to start with which candidates should be able to answer without undue difficulty, e.g. why did you decide to do this topic?, what aspect of the work have you most enjoyed? Further questions should then be asked covering the key issues and in the order previously identified. In questioning the candidate, examiners should:

  - ask questions in a constructive and positive way
    
    Examiners should try to ask questions 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?'

  - use an appropriate range of questioning techniques
    
    Questions may, as Murray (1998) has noted, be general ('How did you come to study this topic?'), open ('tell me about your methodology?') or closed ('why did you think that the confidence limits were unimportant in this case?).

    General or open ones are useful in encouraging the candidate to reflect upon their work, while closed ones lead to specific answers. Examiners
should try to tailor the type of question to the type of answer required and, if possible, aim for a mix of general and open questions (which are harder to answer but can reveal much more about the candidate) and closed ones (which may reveal less but are easier for the candidate to answer).

- recognize that candidates may need time to answer
  Particularly when general or open questions are asked, candidates may need some time to gather their thoughts together and produce a coherent answer. Examiners need to recognize this and encourage candidates to reflect, e.g. by telling them to 'take your time'

- praise a good answer
  When candidates give a particularly incisive or interesting answer, it can be helpful to their morale to praise them

- give candidates a chance to recover from a poor answer
  When candidates give a poor answer, this may be through misunderstanding or nerves. Rephrasing a question and asking it again gives the able candidate the opportunity to recover the position or may confirm the inability to respond of a weaker one.

♦ conclude the candidate’s oral examination
  After you and your co-examiner are satisfied that you have gathered the relevant evidence, you should indicate this to the candidate, thank them for answering your questions, ask whether there are any concluding comments which they wish to make, explain again that the examiners will now consult about the outcome, and tell them how the recommendation will be communicated to them. While this may be done informally after the oral examination, candidates should be informed that formal notification of the result will be sent to them by the Graduate School Administrator.

♦ reach a decision
  Following the conclusion of the oral examination, you should ask the candidate to leave the room while you and your co-examiner discuss and determine an agreed examination outcome in accordance with the recommendations permitted by the University regulations. The examiners discussions should be conducted in strictest confidence and out of range of the candidate or other students.

4.9 Poor practice in conducting the oral examination
  According to Partington, Brown and Gordon (1993: p 78) poor practice when conducting an oral examination would be for an examiner to act throughout as:

♦ an inquisitor
  This examiner 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 candidate so that he or she is unable to respond or anger them to the extent that the oral examination becomes an adversarial confrontation.
♦ a proof reader
This examiner takes candidates line by line through their theses asking questions about errors of spelling, punctuation and grammar. If these are exceptionally poor, instead of proof reading in the oral examination, examiners can make it a requirement that the thesis is re-typed or hand the candidate a list of corrections after the oral examination.

♦ a committee person
The committee person takes the candidate through the thesis page by page questioning each matter as it arises rather than synthesising points into key issues relating to the trigger for the study, the methodology, the design.

♦ a hobby horse rider
This examiner has strong feelings or prejudices about one area of the thesis and keeps returning to questions on this while neglecting other aspects of the research.

♦ a kite flyer
The kite-flyer has identified a – usually fairly tenuous – link between the thesis and another subject and persists in exploring this to the detriment of the examination of the topic as defined by the candidate, i.e. effectively examines a thesis which the student did not write.

♦ a reminiscer
This examiner continually regales the candidate with stories of their own research career to the detriment of the examination of the candidate’s work.

5. Recommendations open to Examiners

5.1 Doctoral candidates
Following the first submission and examination of a candidate, the examiners may make the following recommendations for doctoral candidates:

- **The Candidate be admitted to the degree**
  (a)(i) That the candidate be **admitted immediately** to the degree of Doctor of Philosophy.
  a)(ii) That the candidate be admitted to the degree of Doctor of Philosophy **subject to minor corrections** of the text made to the satisfaction of the internal examiner, normally within a period of one month of receiving formal notification of the corrections to be made.
  (a)(iii) That the candidate be admitted to the degree of Doctor of Philosophy **subject to minor revisions** being made to the satisfaction of the internal examiner, normally within a period of up to six months of receiving formal notification of the revisions to be made.

- **The Candidate be permitted to resubmit for the degree**
  (b)(i) That the candidate’s thesis be deemed to be of a satisfactory standard, but that the candidate be adjudged to have **failed to satisfy the examiners in the oral examination** and that the candidate therefore be required to attend within six months either
for a second oral examination or for a written examination, as the examiners shall determine in their written report.

(b)(ii) That the candidate be adjudged to have failed to satisfy the examiners in the thesis and the candidate be permitted to revise and re-submit the thesis within twelve months for re-examination by both examiners, without a further oral examination.

(b)(iii) That the candidate be adjudged to have failed to satisfy the examiners in the thesis and the candidate be permitted to revise and re-submit the thesis within twelve months for re-examination by both examiners and be re-examined orally.

-The Candidate be recommended for a Master’s degree

(c)(i) That the candidate has reached the standard required for the appropriate Master’s Degree and should immediately be awarded that degree instead.

(c)(ii) That the candidate has reached the standard required for the appropriate Master’s Degree and should be awarded that degree instead subject to minor corrections of the text made to the satisfaction of the internal examiner, normally within a period of one month of receiving formal notification of the corrections to be made.

(c)(iii) That the candidate has reached the standard required for the appropriate Master’s Degree and should be awarded that degree instead subject to minor revisions being made to the satisfaction of the internal examiner, normally within a period of up to six months of receiving formal notification of the revisions to be made.

-The Candidate be permitted to resubmit for a Master’s degree

(d) That the candidate be permitted to revise and re-submit the thesis for the appropriate Master’s Degree within twelve months for re-examination by both examiners and be re-examined orally if the examiners so require by indication in their written report.

-The Candidate be adjudged to have failed to satisfy the examiners

(e) That no degree be awarded and that the candidate be adjudged to have failed.

Recommendations for doctoral award ((a) above)

In cases where examiners are satisfied that all of the criteria for the doctoral award are fully met, they should recommend the award of the degree immediately or subject to making minor textual corrections or minor revisions to the satisfaction of the internal examiner.

Where the examination has been conducted by two external examiners, they should agree between themselves who will receive the revisions before the award is finally recommended.
Other recommendations ((b) to (e) above))

In cases in which examiners are not satisfied that all of the criteria are fully met and are unable to recommend award, then there is a range of other recommendations which can be made. A recommendation to revise a thesis for resubmission and re-examination should only be made if, in the judgement of the examiners, it has the potential to meet the standards for the original award submitted for or for another award. If it does not, then it should be failed.

Recommendations Following a Further Oral or Written Examination

In the cases of candidates subject to recommendations c(i), c(ii), c(iii) and (d) above, the only options open to the examiners when re-examining the thesis are:

- The Candidate be admitted to the degree

  (a)(i) That the candidate be admitted immediately to the degree of Doctor of Philosophy.

  (a)(ii) That the candidate be admitted to the degree of Doctor of Philosophy subject to minor corrections of the text made to the satisfaction of the internal examiner, normally within a period of one month of receiving formal notification of the corrections to be made.

  (a)(iii) That the candidate be admitted to the degree of Doctor of Philosophy subject to minor revisions being made to the satisfaction of the internal examiner, normally within a period of up to six months of receiving formal notification of the revisions to be made.

- The Candidate be recommended for a Master’s degree

  (b)(i) That the candidate has reached the standard required for the appropriate Master’s Degree and should immediately be awarded that degree instead.

  (b)(ii) That the candidate has reached the standard required for the appropriate Master’s Degree and should be awarded that degree instead subject to minor corrections of the text made to the satisfaction of the internal examiner, normally within a period of one month of receiving formal notification of the corrections to be made.

- The Candidate be adjudged to have failed to satisfy the examiners

  (c) That no degree be awarded and that the candidate be adjudged to have failed.

5.2 Master of Philosophy candidates

Following the first submission and examination of a candidate, the examiners may make the following recommendations for Master of Philosophy candidates:

- The Candidate be admitted to the degree

  (a)(i) That the candidate be admitted immediately to the degree of Master of Philosophy.
(a)(ii) That the candidate be admitted to the degree of Master of Philosophy subject to minor corrections of the text made to the satisfaction of the internal examiner, normally within a period of one month of receiving formal notification of the corrections to be made.

(a)(iii) That the candidate be admitted to the degree of Master of Philosophy subject to minor revisions being made to the satisfaction of the internal examiner, normally within a period of up to six months of receiving formal notification of the revisions to be made.

- The Candidate be permitted to resubmit for the degree

(b)(i) That the candidate’s thesis be deemed to be of a satisfactory standard, but that the candidate be adjudged to have failed to satisfy the examiners in the oral examination and that the candidate therefore be required to attend within six months either for a second oral examination or for a written examination, as the examiners shall determine in their written report.

(b)(ii) That the candidate be adjudged to have failed to satisfy the examiners and the candidate be permitted to revise and resubmit the thesis within twelve months without a further oral examination.

(b)(iii) That the candidate be adjudged to have failed to satisfy the examiners and the candidate be permitted to revise and resubmit the thesis within twelve months and be re-examined orally.

- The Candidate be adjudged to have failed to satisfy the examiners

(c) That no degree be awarded and that the candidate be adjudged to have failed.

Recommendations for the Master of Philosophy award ((a) above)

In cases where examiners are satisfied that all of the criteria for the MPhil award are fully met, they should recommend the award of the degree immediately or subject to making minor textual corrections or minor revisions to the satisfaction of the internal examiner.

Where the examination has been conducted by two external examiners, they should agree between themselves who will receive the revisions before the award is finally recommended.

Other recommendations ((b) and (c) above))

In cases in which examiners are not satisfied that all of the criteria are fully met and are unable to recommend the MPhil award, then a recommendation to revise a thesis for resubmission and re-examination should only be made if, in the judgement of the examiners, it has the potential to meet the standards for the MPhil award. If it does not, then it should be failed.
Recommendations Following a Resubmission

In the cases of candidates subject to recommendations b(i), b(ii) and b(iii), the only options open to the examiners when re-examining the thesis are:

- The Candidate be admitted to the degree
  (a)(i) That the candidate be admitted immediately to the degree of Master of Philosophy.
  (a)(ii) That the candidate be admitted to the degree of Master of Philosophy subject to minor corrections of the text made to the satisfaction of the internal examiner, normally within a period of one month of receiving formal notification of the corrections to be made.
  (a)(iii) That the candidate be admitted to the degree of Master of Philosophy subject to minor revisions being made to the satisfaction of the internal examiner, normally within a period of up to six months of receiving formal notification of the revisions to be made.

- The Candidate be adjudged to have failed to satisfy the examiners
  (b) That no degree be awarded and that the candidate be adjudged to have failed.

In deciding which of these recommendations to make in a given case, examiners should also take into account of the factors in 5.3 below.

5.3 Other factors to be considered in determining the outcome

♦ the amount of work entailed in revising the thesis
  It is possible to recommend that the thesis should be revised and resubmitted within either six or twelve months, and examiners have to make a judgement about the amount of work entailed. If this is a re-writing of sections of the thesis, then normally up to six months is appropriate; if it is a complete re-write, then within twelve months would be appropriate. If further research is required, this should normally be secondary, e.g. discriminating data or recalculating statistics, and not primary, e.g. gathering new data.

♦ external factors relating to the research
  While, of course, external factors relating to the research must not generally be regarded as extenuating in the context of recommending award, examiners may wish to take into account the availability of equipment or facilities when considering the time within which a candidate should have the opportunity to revise and re-submit their thesis, subject to the maximum of twelve months.

♦ the personal circumstances of the candidate
  ♦ 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.
  ♦ 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.

♦ 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.

♦ Irrespective of personal circumstances, examiners will be expected to assess the candidate against the assessment criteria for the relevant research degree. Personal circumstances must not generally be regarded as extenuating in the context of recommending award. However, examiners might wish to take personal circumstances into account when considering the recommendations open to them and when specifying the time within which the candidate should have the opportunity to revise and re-submit, subject to the maximum of twelve months.

♦ Such personal circumstances may include illness, pregnancy, personal stress, linguistic or cultural difficulties in undertaking and writing up the research.

♦ 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.

♦ Additionally, in the rare cases of candidates whose thesis is satisfactory but who fail the oral examination, personal circumstances may be taken into account in considering whether to hold a second oral examination or to hold a written examination. So if, for example, there are medical reasons why the candidate will perform poorly in an oral examination or in cases where candidates are returning overseas and will find it difficult to return for a second oral examination, examiners may consider substituting a written test.

6. Writing the Final Report

After reading the thesis and, if appropriate, conducting the oral examination, examiners have to decide upon a recommendation, write a report on the examination, and decide what information should be given to candidates required to amend or re-submit theses or dissertations. External examiners are also invited to make comments on any aspect of candidate’s experiences which they have judged to be particularly good or which have raised problems.

Where an oral examination has been held, the final report should be written immediately following the oral examination or as soon as possible thereafter.

In the vast majority of cases, examiners independently arrive at the same verdict and concur in the recommendation. They should then jointly complete the supplied final report form. This involves completing a checklist of how far the criteria for the award have been met by the candidate and stating the
recommendation to Senate. Final reports should be sent to the Graduate School Administrator who will, subject to approval by the relevant Dean of Postgraduate Studies, forward them to the candidate and the candidate's supervisor.

In a few cases, examiners may be unable to agree upon a recommendation. In this case, they should complete the form indicating their recommendations and the grounds for disagreement, and forward it to the Graduate School Administrator. (This report will not be made available to the candidate but will, if the candidate should subsequently appeal, form part of the formal record of appeal). The University will then appoint a new external examiner who will re-examine the thesis, if necessary conduct a further oral examination, and make a recommendation which is final. The additional examiner shall be told that the previous examiners had failed to reach agreement but will not have sight of the report. On the occasion of the second oral examination the candidate's supervisory team (and where appropriate the Internal Examiner) shall be available to be consulted by the additional external examiner. The relevant Dean of Postgraduate Studies shall appoint a member of University staff as an independent observer, who will report on the conduct of the oral examination. The main supervisor shall co-ordinate the arrangements for the oral examination. After the conclusion of the oral examination, the additional examiner shall make a recommendation which shall be final. He/she shall submit a final report to the relevant Graduate School Administrator who will, subject to the approval of the relevant Dean of Postgraduate Studies, forward it to the candidate and the candidate's supervisory team in the normal way.

6.1 Giving Information to Candidates Required to Revise or Resubmit Work

In cases where the recommendation is that changes need to be made to the thesis before resubmission, it is the responsibility of the examiners to provide a joint written statement providing full details of all changes and revisions required. This forms part of the Examiners’ Joint Report which shall be formally forwarded to the candidate and the supervisory team by the relevant Graduate School Administrator with formal written confirmation of the examination outcome. It should be noted that the presumption is that if the candidate makes these changes and revisions to the satisfaction of the designated examiner this will lead to a recommendation for award. Normally it is the internal examiner who examines any minor corrections or minor revisions required to the thesis for students, but where there are two external examiners, it should be agreed who will undertake the role to examine the minor correction or minor revisions. Where a resubmission is required, both examiners will examine the resubmitted thesis.

It is therefore important that, before they part after the oral examination, the examiners agree exactly what the student is required to do before revision or resubmission. Where the recommendation is that the degree be awarded subject to minor textual changes, this will simply consist of a list of the corrections required, but where the thesis is referred for minor revisions (within a period of up to six months) or resubmission (within twelve months), a more substantial list of changes/work to be done must be provided. It is vital that this is comprehensive – a student who has made all of the changes required by the examiners but who is then denied the award because of further deficiencies would have good grounds for appeal.
6.2 Commenting upon the Candidate's Experience

External examiners are invited to make any relevant comments upon aspects of a candidate's experience or the examination process which they feel have been particularly good or which have raised problems. These comments will be sent to the relevant Dean of Postgraduate Studies for consideration.

References

R. Murray, The Viva (University of Strathclyde: Centre for Academic Practice, 1998)


Appendices

A) Additional Information for Examiners of Theses Submitted in Partial Fulfillment of the Requirements of the Doctor of Philosophy (Integrated)

Integrated PhD programmes consist of two components:

1. Taught Component (120 - 200 credits):

This consists of taught modules including a choice of specialist modules and research methods modules. An individual programme of study is agreed between the student and the Degree Programme Director. All assignments are subject to moderation by an external examiner for the programme.

2. Research Component:

Every student submits a thesis of approximately 50,000 words (or as set out in Faculty guidance in the Rules for Form of Theses: http://www.ncl.ac.uk/regulations/docs/20RulesThesis.pdf). A formal written research proposal is approved by an independent school panel and supervisor/s are allocated. There is a formal progression meeting to approve progression from the taught to the research element. An independent school panel makes a recommendation on progress on the research element of the programme annually.

According to the University’s regulations: “Candidates for the degree of Doctor of Philosophy (Integrated) are required to demonstrate:

(a) a systematic acquisition and understanding of a substantial body of knowledge which is at the forefront of an academic discipline or area of professional practice;

(b) the creation and interpretation of new knowledge, through original research or other advanced scholarship, of a quality to satisfy peer review, extend the forefront of the discipline and merit publication;

(c) the general ability to conceptualize, design, implement and adjust a project for the generation of new knowledge, applications, or understanding at the forefront of the discipline. Where appropriate, also to demonstrate the ability to formulate and test hypotheses and to generate alternative explanations for the data available;

(d) a detailed understanding of applicable techniques for research and advanced academic enquiry;
(e) a range of advanced professional and key skills related to their likely employment context including the ability to communicate their ideas and conclusions clearly and effectively to specialist and non-specialist audiences.

A doctoral thesis should exhibit substantial evidence of original scholarship and contain material worthy of publication.”

An acceptable Integrated PhD thesis will therefore meet the same criteria as those laid down by the University for a traditional PhD thesis, namely original scholarship, methodological rigour and the inclusion of material of publishable quality. The length of the thesis will be around two-thirds of the length of a traditional PhD thesis, approximately 50,000 words. It is therefore likely that the Integrated PhD thesis will be more tightly focused, the literature review less broad in scope and the quantity but not the quality of data collected less than might normally be expected for a traditional PhD. Nevertheless, the rigour of the methodology, its validity and reliability, and the quality of analysis will match that of a traditional PhD thesis.

Students are encouraged to use their assignments from the taught element of the programme to help formulate their ideas, construct the methodology and explore the literature for their thesis. For many students, therefore, some of the work that might normally be found in a traditional PhD thesis will already have contributed to the assessed work for the taught component. These assignments are subject to external examination. They can however, be made available to both internal and external examiners of Integrated PhD theses prior to the oral examination should the examiners so require.

B) Additional Information for Examiners of Theses Submitted in Partial Fulfillment of the Requirements of practice-based Doctoral degrees in Arts and Humanities

1. Fine Art and Digital Cultures practice-based PhD

In the field of Fine Art and Digital Cultures, candidates whose submission is not covered by the normal PhD regulations will undertake the following:

i) Research in creative Fine Art and Digital Cultures practice, leading to a final submission of a substantial body of creative art work which demonstrates coherence and originality and constitutes a recognisable contribution to the development of contemporary Fine Art and Digital Cultures practice.

and
ii) A critical commentary normally between 20,000 and 50,000 words. In this, the candidate will document and demonstrate in relation to the issues and questions identified and examined in the research project, a critical and reflective understanding of his/her creative processes, and demonstrate a critical and informed understanding of the contexts in which the artwork has been made. It will explain how this field has been expanded or developed through the candidate’s research. This component of the submission will also include thorough visual documentation of the creative work.

2. **Music practice-based PhD**

In the field of music, candidates whose submission is not covered by the normal PhD regulations may undertake one of the following:

i) submit a portfolio of original compositions in an agreed format

or

ii) carry out substantial research in creative practice, leading to a final submission that includes documented performance as supplementary material

The expression "in an agreed format" is intended to accommodate a broad definition of composition where innovative modes of presentation are given equal consideration to submissions in conventional formats.

In both categories above, the final submission should constitute a substantial body of work demonstrating originality informed by contemporary practice, and demonstrating cohesion, command of existing technique and a recognisable contribution to the development of the discipline. A self-critical commentary normally between 20,000 and 40,000 words should be submitted demonstrating an ability to situate the candidate’s creative practice within the broader context of the discipline. The submission should be supported by relevant audio and, if appropriate, audio-visual material.

3. **Film Practice practice-based PhD**

In the field of Film Practice, candidates whose area of research is not covered by the normal PhD regulations will undertake the following:

i. Research in creative Film practice leading to a final submission of substantial body of creative work which demonstrates coherence and originality and constitutes recognisable contribution to the development of contemporary Film practice. This research should be in an agreed format and may include a feature-length non-fiction/ documentary/ hybrid film, or a series of related short non-fiction/ documentary/ hybrid films. This information must be incorporated digitally in the hard copy of the thesis, but may also - by arrangement with the research supervisors – be presented in its original form in an exhibition or installation.

and

ii. A critical commentary between 20,000 and 50,000 words. In this the candidate will document and demonstrate a critical and reflective understanding of his/her creative processes in relation to the issues and questions identified and examined in the research project. The commentary must frame the overall project, intellectually situating it in relation to relevant
texts and practices within the broader disciplinary context. It will explain how the research field has been expanded or developed through the candidate’s research.

4. **Theatre/Performance practice-based PhD**

In the field of theatre/performance, candidates whose submission is not covered by the normal PhD regulations will undertake the following:

i) Research in creative theatre/performance practice, leading to the delivery of a substantial piece of creative work which demonstrates coherence and constitutes a recognisable contribution to the development of contemporary performance practice, and

ii) A critical commentary normally between 20,000 and 50,000 words. In this the candidate will document and demonstrate a critical and reflective understanding of his/her creative processes in relation to the issues and questions identified and examined in the research project, and present a critical and informed understanding of the contexts in which the performance has been made. It will explain how this field has been expanded or developed through the candidate’s research. This component of the submission will also include documentation of the creative work.

As with all research degrees, the University requires that work presented for examination in the field of theatre/performance should demonstrate the ability to create and interpret new knowledge through original research and advanced scholarship (for further details, see Section 3 ‘Examination Criteria’ in the Handbook for Examiners of Doctoral and Masters of Philosophy Research Degree Examiners Handbook).

5. **PhD in Creative Writing**

A PhD in Creative Writing is weighted 70:30, with 70% of the submission being the creative project. The most significant part of the PhD and its main focus is therefore a substantial, original piece of creative work written specifically for the degree: a novel or collection of short stories; a collection of poetry; a play script or screenplay. As indicated, we would expect this part to be equivalent to two thirds of an academic PhD thesis of 100,000 words. We do not set more precise word limits on the individual components of the work because of the different requirements of different genres, but the exact word length will be agreed upon in consultation with the supervisory team and the Assistant PG Director for Creative Writing.

The second part of the thesis should be a critical section of around 30,000 words, which explores a topic, genre, theme, writer or group of writers. It is expected that the topic chosen for this part of the thesis should have some evident relationship to the creative element. This relationship may be direct or more oblique, but it must be articulated in the critical section, perhaps as an introduction or conclusion. It is necessary to pass both elements to be awarded the degree.
Different approaches to the critical part are acceptable and it can include an essay, interview material, or a creative journal, in which a student may use their own creative process as subject, and reflect upon their own work. Key to this part of the PhD is a serious body of reading, careful and correct referencing, and a bibliography. The style and structure of the resulting submission needs to be as carefully thought about as any other literary thesis, and must be germane to the research question as established at the point of application and recorded in the Project Approval Form.

For all research degrees, the University requires that work presented for examination should be: authentic in the sense that the submission should be the candidate’s own work; scholarly, conforming to the normal canons of scholarship; professional, demonstrating that the author has acquired the skills of a professional researcher; and well-structured, well-written, and well-presented. (For further details, see Section 3 ‘Examination Criteria’ in the Handbook for Examiners of Research Degrees by Theses.)

The critical section can also be thought of as requiring a third of the time spent on the thesis, i.e. a unit of twelve months, however this might be distributed across the period of study as a whole. It would be unreasonable to expect Creative Writing students to develop within a twelve-month period the same theoretical and methodological background as students in Literature, or to have formed the same historical or contextual perspective. The critical component of the research will be likely to be more tightly focused, the review of literature less broad in scope and the quantity but not the quality of any information collected less than might be expected of a PhD in English Literature. The more focused nature of the critical component means that the criteria of originality and publishability laid down for the traditional PhD are more likely to apply to the creative project than the critical part. We interpret ‘publishable’ as referring to literary quality rather than to marketability. Nevertheless, the rigour of the work and the quality of the analysis will match that of the PhD in English Literature.

Therefore, the critical part of the thesis should be judged against the following criteria:

- How far is it a piece of work which demonstrates a doctoral level of attainment in terms of its intellectual engagement, scope, planning and argument which might be possible to achieve in twelve months?
- How far does it demonstrate a doctoral level of research and reading which it might be possible to achieve in twelve months?
- How far is it scholarly and accurate in its presentation?
- How far does it support and contextualise the originality of the creative project?

6. Practice-based Research Degrees in Architecture, Planning and Landscape

PhD

In the fields of Architecture, Planning and Landscape, candidates whose submission is not covered by the normal PhD regulations may undertake a PhD in Creative Practice.

This entails:

i) Carrying out substantial research in creative practice in Architecture, Planning or Landscape, leading to a final submission of a significant
body of creative work, which demonstrates originality, coherence and understanding and makes a recognisable contribution to the development of the discipline. The research should develop through creative and sophisticated engagement with appropriate media and technologies (drawings, models, photography, installations, digital media, etc.). This material must be incorporated in the hard copy thesis document (see paragraph ii) below), but may also – by arrangement with the research supervisors – be presented in its original form (e.g. digitally, in a portfolio, in an exhibition, by installation, etc.).

and

ii) The submission of a hard copy thesis document that records, curates and presents the research carried out by creative practice and contains a critical commentary on it of between 20,000 and 50,000 words. This must frame the overall project, intellectually situating it in relation to relevant texts and practices and providing an extended critical and reflective analysis which situates the student’s supporting research within the broader disciplinary context.

NB. As an alternative to the standard format, students undertaking research by creative practice may submit their hard copy thesis as a bound A3 document, with pages printed on both sides. The design of the thesis document is itself an important concern, which can work in concert with the research, and therefore theses do not have to observe the normal font and line-spacing requirements providing legibility is maintained.

MPhil
A thesis submitted for a practice-based MPhil in Creative Practice must incorporate an 8,000 - 20,000 word commentary together with full documentation of the practice-based research output. Formatting requirements correspond to those set out for the practice-based PhD in Architecture, Planning and Landscape.

7. Creative Practice PhD in Museum, Gallery and Heritage Studies

In the field of Museum, Gallery and Heritage Studies, candidates whose submission is not covered by the normal PhD regulations will undertake the following:

i) Research in creative Museum, Gallery and Heritage practice leading to a final submission of a substantial body of creative work which demonstrates coherence and originality and constitutes a recognisable contribution to the development of contemporary Museum, Gallery and Heritage practice. This research should be in an agreed format and may include a curated exhibition, interpretation product(s), digital media and educational activities related to a museum/gallery/heritage context. This information must be incorporated digitally or in a portfolio in the hard copy of the thesis, but may also – by
arrangement with the research supervisors – be presented in its original form in an exhibition or installation.

and

iii) A critical commentary normally between 20,000 and 50,000 words. In this, the candidate will document and demonstrate a critical and reflective understanding of his/her creative processes in relation to the issues and questions identified and examined in the research project. The commentary must frame the overall project, intellectually situating it in relation to relevant texts and practices within the broader disciplinary context. It will explain how the research field has been expanded or developed through the candidate’s research.

iv)  

C). Additional Information for Examiners of Theses Submitted in Partial Fulfilment of the Requirements of the joint Doctor of Business Administration (DBA) degree

The DBA awarded jointly by Grenoble Ecole de Management and Newcastle University is a professional practice doctorate, research-based and specifically designed to make a contribution to the enhancement of trans-disciplinary professional practice in management; as well as a contribution to novel knowledge production via the application and development of appropriate theoretical frameworks, methods, and techniques. This joint DBA is equal in quality and standing to the traditional PhD although it stems from the formulation of research questions informed by management practice and places emphasis on the novel application of theory, rather than the creation and testing of theory for its own sake. The programme is aimed at practicing managers who aspire to reach the highest academic qualification in Management and Business Studies. Its mode of delivery is through distance learning and a series of intensive residential workshops in the first two years of study.

An acceptable DBA thesis, based on original and individual research carried out throughout the DBA programme, should demonstrate a systematic acquisition and understanding of a body knowledge that is at the forefront of the academic disciplines that inform the candidate’s area of professional practice. In addition, it should contribute to that practice by creating knowledge through original research and demonstrating how such knowledge helps improve current practice within an organization or a field. The examiners should therefore pay particular attention in the discussion of implications to not only theory, but also policy and practice, in one or more organizational settings.
The DBA thesis will meet the main criteria for a traditional PhD thesis, namely original scholarship, methodological rigour and the inclusion of material of publishable quality. It will differ only in its emphasis on implications for management policy and practice. The length of the thesis will be approximately 60,000 to 80,000 words. The DBA thesis will be more tightly focused on the candidate’s work environment, the literature review as broad and deep in scope as in a traditional PhD; and the quantity and quality of data collected as well as the rigour of the methodology, its validity and reliability, and the quality of analysis will match that of a traditional PhD thesis.

The joint DBA oral examination will be an ‘open door’ event, with the stipulation that only the internal and external examiners are allowed to ask questions of the candidate. The preliminary reports by the examiners will be confidential and there will be no opportunity to revise the thesis prior to the oral examination. The possible outcomes of a DBA oral examination mirror the ones for the PhD oral examination.

D) Additional Information for Examiners of Theses Submitted in Partial Fulfilment of the Requirements of the Doctorate of Clinical Psychology

Taught Component:
This consists of teaching and workshops to cover the curriculum stipulated by the HCPC standards and those of the British Psychological Society accreditation standards. Topics covered include; assessment, formulation, interventions, personal and professional development, as well as research methods. A number of assignments are used to assess skills, and knowledge in these areas including essays, critical review, portfolios, and a clinical viva/oral examination. All assignments are subject to moderation according to the University procedures and are reviewed by an external examiner for the programme.

Clinical Component:
In accordance with BPS and HCPC requirements, approximately 50% of the time on the course is spent working in a clinical setting. These placements cover the four mandatory experience areas (adult, child and family, learning disabilities, and older adults), and in the final year a 10 month elective placement is available. Clinical competence is assessed via observation of practice by supervisors, assessment on a trainee competence checklist and from assessment of case studies. Case studies are subject to moderation according to the University procedures and all clinical materials are available for review by an external examiner for the programme.

Research Component:
Every student submits a thesis consisting of a literature review and an empirical paper. Each is approximately 5,000 to 8,000 words (excluding references and appendices). A project compendium outlines potential project
areas, and trainees work with supervisors to identify potential research questions. A formal written research proposal is approved by an independent school panel (consisting of University representatives, NHS clinicians, and recent graduates) in the first year. Progress on all elements of the course, including the research element of the programme is undertaken annually. Successful completion of all elements of the course is necessary to proceed to the next stage of the programme.

An acceptable DClin Psy thesis will meet the same criteria as those laid down by the University for a traditional PhD thesis, namely original scholarship, methodological rigour and the inclusion of material of publishable quality. The literature review and empirical study will reflect an ability to review the empirical literature critically and to conduct original investigations, to test ideas and to understand the relationship of the chosen topic to wider fields of knowledge in psychology and its application.

The length of the thesis is substantially less than that of a traditional PhD thesis. It is therefore likely that the DClin Psy thesis will be more tightly focused, the literature review less broad in scope and the quantity but not the quality of data collected less than might normally be expected for a traditional PhD. Nevertheless, the rigour of the methodology, its validity and reliability, and the quality of analysis will match that of a traditional PhD thesis.

The overall Doctorate may be awarded with Distinction if the candidate’s empirical paper received a distinction grade and all other elements have received at least a pass grade (Regulations 19). A candidate will be awarded a Pass with Distinction in Research if the empirical paper is of distinction standard and performance in the oral examination demonstrates to the examiners that the written work is commensurate with the candidate’s performance.

If at the oral examination the dissertation has not met the required standard and is not capable of remediation, and if the candidate has reached the standard required in other areas of the course, it may be suitable for an appropriate Exit Award. Similarly, candidates who, following the requisite number of resit attempts, have failed to successfully complete all units of assessment in the final year of studies (maximum of one failed unit) may be awarded the MSc Clinical Applications of Psychology. This will not entitle registration with the HCPC.

The criteria for the award of marks following oral examination can be found at http://www.ncl.ac.uk/psychology/assets/documents/VivaFeedbackGrid.docx
E) Additional Information for Examiners of Theses Submitted in Partial Fulfilment of the Engineering Doctorate in the Schools of Chemical Engineering and Advanced Materials (CEAM) and Civil Engineering and Geosciences (CIVG)

Engineering Doctorate (EngD) programmes consist of two components:

1. Taught Component (120-200 credits):
   This consists of taught modules including a choice of specialist modules and research methods modules. An individual programme of study is agreed between the student and the Degree Programme Director. All assignments are subject to moderation by an external examiner for the programme.

2. Research Component:
   Every student submits a thesis that takes the form of either a PhD thesis or a thesis by portfolio as appropriate to his or her research studies. According to the University’s regulations: Candidates for the degree of Engineering Doctorate are required to demonstrate:
   a) a systematic acquisition and understanding of a substantial body of knowledge which is at the forefront of an academic discipline or area of professional practice;
   b) the creation and interpretation of new knowledge, through original research or other advanced scholarship, of a quality to satisfy peer review, extend the forefront of the discipline and merit publication;
   c) the general ability to conceptualize, design, implement and adjust a project for the generation of new knowledge, applications, or understanding at the forefront of the discipline. Where appropriate, also to demonstrate the ability to formulate and test hypotheses and to generate alternative explanations for the data available;
   d) a detailed understanding of applicable techniques for research and advanced academic enquiry;
   e) a range of advanced professional and key skills related to their likely employment context including the ability to communicate their ideas and conclusions clearly and effectively to specialist and non-specialist audiences.

A doctoral thesis should exhibit substantial evidence of original scholarship and contain material worthy of publication.

For a thesis by portfolio, there is a requirement that a theme underpins the thesis and that each section is directly associated with said theme. The thesis must contain an Introduction that draws together the various sections and positions the research undertaken in the context of the overarching theme and places the work in the context of the current state-of-the-art in both academic and industrial research.
An acceptable Engineering Doctorate thesis will therefore meet the same criteria as those laid down by the University for a traditional PhD thesis, namely original scholarship, methodological rigour and the inclusion of material of publishable quality. The length of the thesis will be around two-thirds of the length of a traditional PhD thesis, approximately 50,000 words. It is therefore likely that the EngD thesis will be more tightly focused, the literature review less broad in scope and the quantity but not the quality of data collected less than might normally be expected for a traditional PhD. Nevertheless, the rigour of the methodology, its validity and reliability, and the quality of analysis will match that of a traditional PhD thesis.

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.

1 Integrity and honesty

1.1 Researchers should be honest and ethical in respect of their own actions in research and their responses to the actions of other researchers. This applies to the whole range of research work, including experimental design, generating and analysing data, acting as a reviewer or referee on grant applications or research papers etc, applying for funding, publishing results, and acknowledging the direct and indirect contributions of colleagues, collaborators and others.

1.2 Plagiarism, deception or the fabrication or falsification of results, is regarded by the University as a serious disciplinary offence.

2 Research Misconduct

2.1 The University takes seriously any allegation of research misconduct and has a written procedure for investigating and resolving such allegations.

2.2 Researchers are encouraged to report cases of research misconduct and to do so in a responsible and appropriate manner. (See University Policy and Procedure for Investigating Allegations of Research Misconduct. http://www.ncl.ac.uk/res/research/ethics_governance/governance/index.htm).

Staff and students should be aware that the University has a policy on Public Interest Disclosure (whistleblowing), which governs any instances of malpractice or impropriety:

https://my.ncl.ac.uk/staff/assets/documents/PolicyandProcedureonPublicInterestDisclosure.pdf

3 Leadership and co-operation in research groups

3.1 The Vice-Chancellor, Pro-Vice-Chancellors, Deans of Research, Heads of Academic Units, Professorial and all other senior staff are responsible for creating a climate and capacity which ensures that research is conducted in accordance with good research practice.

3.2 Lead researchers have responsibility to ensure that a climate of mutual co-operation is created in which all members of the research team are encouraged to develop their skills and in which both the open exchange of ideas and supportive criticism are fostered.

3.3 Researchers should ensure that they have the necessary skills and resources to conduct their research & to access relevant training as appropriate (see http://www.ncl.ac.uk/staffdev/ and https://internal.ncl.ac.uk/fundingtoolkit/ or contact the University Research Office & Staff Development Unit for
signposting to appropriate courses). Staff supervising other staff or students must ensure that appropriate direction of research and supervision is provided, as well as training and opportunities for development and the necessary resources to enable them to conduct their research to the required standards.

4 Openness

4.1 While recognising the need for researchers to protect their own and the University’s research interests in the process of planning their research, obtaining and publishing the results, and seeking to develop the outcome of their research into application (where relevant), the University encourages researchers to be as open as possible in discussing their work with other researchers, and with the public. Research may be undertaken under conditions of confidentiality; however, these conditions should be as narrowly defined as appropriate to the research activity.

4.2 Once results have been published the University expects researchers to make available relevant data and materials to other researchers on request, provided that this is consistent with any ethics approval and consents which cover the data and materials and any intellectual property rights in them and wherever possible disseminated via Open Access Forums.

4.3 Researchers must adhere to the requirements of the Freedom of Information Act (http://www.ncl.ac.uk/foi/staff/index.htm).

5 Guidance from professional bodies

5.1 Researchers are expected to observe the standards of research practice set out in guidelines published by funding bodies, scientific and learned societies and other relevant professional bodies.

5.2 All researchers should be aware of, and comply with, the legal requirements which regulate their work.

5.3 Researchers should be aware of the expectations of the University as a publicly funded institution, and should act accordingly. They should ensure that any research undertaken complies with any agreements, terms and conditions relating to the project, and allows for proper governance and transparency.

6 Ethical Approval

6.1 All research conducted in the University must be carried out in accordance with the University’s Ethics in Research - Policy and Procedure (which includes reference to the NHS requirements). ‘Part 1 – Preliminary Questions’ must be completed to establish if the project requires further ethical review. If this is required, then ‘Part 2 – Further Details’ must also be completed for review from a Newcastle Committee. 6.2 If material differences are made to the research protocol i.e. to research methodology, then further ethical approval should be sought where appropriate.

7 Safety

7.1 The University requires every member of staff to uphold high personal standards with regard to safety and to communicate these standards to all those involved in research, including but not limited to researchers, research subjects, patients, participants or others, in line with the University Safety Policy (www.safety.ncl.ac.uk/policies.aspx).
8 Documenting results and storing primary data

8.1 Researchers should ensure consideration is given to the retention of data and samples before any work commences. There should be clarity at the outset of the research programme as to the ownership of, where relevant:

- data and samples used or created in the course of the research; and
- the results of the research

8.2 Researchers should keep clear and accurate records of the procedure followed and the approvals granted during the research process, including records of the interim results obtained as well as the final research outcomes. This is necessary not only as a means of demonstrating proper research practice, but also in case questions are subsequently asked about either the conduct of the research or the results obtained. These records should be dated and signed. Research involving patients should adhere to the Trust SOP on Data Archiving and all other relevant guidelines.

8.3 Research records should be retained and managed in order to:

- Demonstrate compliance with relevant legislation (e.g. Data Protection Act)
- Demonstrate effective and auditable process, ensuring compliance with requirements of external funders, professional bodies and auditors
- Demonstrate information is accurate, authentic and verifiable
- Protect members of the University from allegations of misconduct

8.4 Research records cover the research data and samples used or created in the course of the research, the research process including applications for regulatory approval, research outcomes such as reports and publications, and project management contracts, budgetary details etc. This data may be stored in multiple different systems managed by different people.

8.5 The Principal Investigator is ultimately responsible for managing research records - their accuracy, completeness and security. However research students, staff researchers and supervisors, support and administrative staff must also assume responsibility for their parts of and support for the process.

8.6 Research records should be retained for only as long as required. The duration should take into account legislative and regulatory requirements as well as subject specific, administrative and operational needs. For example this may be constrained to relatively short time periods for personal information subject to the Data Protection Act, ranging perhaps up to decades for long term longitudinal studies. For further advice contact the Information Security Team in ISS on rec-man@ncl.ac.uk

8.7 Information generated during the course of research should be kept securely, for the duration above; this includes ensuring that information is not lost, corrupted, or disclosed inappropriately, it may also need to ensure verifiable destruction of information at some point in time. The means and process for managing the information: storage environment, backup, access control etc. must be appropriate to needs – Information Systems and Services offer a range of storage and administrative services see: http://www.ncl.ac.uk/itservice/. Also, see the Information Security Policy http://www.ncl.ac.uk/itservice/policies/information-security-policy.pdf.
9 Publishing Results

9.1 Researchers should publish at the earliest possible time, taking into account the appropriate medium for the highest publication impact. Consideration should be given to the provisions of open access for research publications where appropriate. All outputs should be referenced in MyImpact, the University’s Institutional Repository and therefore linked to the e-prints open access repository.

9.2 Researchers should have regard for the many different routes for dissemination, implementation and commercialisation potential of their work and take appropriate steps to advise the University of any inventions and, where appropriate, take steps to protect any intellectual property prior to publication.

9.3 Whilst the publication of the results of research may need to be delayed for a reasonable period pending protection of intellectual property arising from research, such periods of delay in publication should be kept to a minimum.

9.4 Anyone listed as an author on a paper should accept responsibility for ensuring that he/she is familiar with the contents of the paper and can identify his/her contribution to it and must refer to being part of Newcastle University. The practice of honorary authorship is unacceptable.

10 Media

Whilst the University encourages the communication of research to the wider public, normally statements to the media should be made only after consultation with the University Press Office. Any disclosure to the popular media should endeavour to place the research in its appropriate context and care should be taken not to exaggerate the impact of any findings. Appropriate training and guidance should be sought concerning dealings with the press and broadcasting media.

11 Use of Results

11.1 Researchers are expected to maximise the prospects of research being taken into practice through commercial and other exploitation routes by protecting intellectual property (IPR).

11.2 Researchers should ensure that all contracts and agreements are sent through the University’s Research and Enterprise Services to ensure that any contracts or agreements relating to their research contain a provision for IP ownership.

11.3 Where a commercial route is not appropriate then it is expected that researchers will take appropriate steps to ensure that research findings are transferred to relevant user communities.

12 Collaborators and other participants

12.1 The contributions of formal collaborators and all others who directly assist or indirectly support the work should be properly acknowledged.

12.2 Researchers should be satisfied that standards and procedures at the organisations with which they are collaborating are suitable for the conduct of the research. Checks should be made with the Director of Research and Enterprise Services.
13 Managing Research Projects

13.1 Research Directors/Centre Directors/Research Group Leaders are responsible for ensuring the promulgation of the Code of Good Practice to individuals in their Units. The PI is the lead researcher with regard to the project and is responsible for ensuring compliance with this Code by all those working on projects that they are PI.

13.2 Researchers have a responsibility to ensure that they, and all those who involved in the project, are fully aware of the terms and conditions of grants and contracts and the implication of these in relation to their research projects.

14 Conflict of Interest

14.1 Researchers should declare and manage any real or potential conflicts of interest both financial and professional. These might include:

- where the researchers have an existing or potential interest in the outcome of the research;
- where there is a private, or private practice, benefit significantly dependent upon the outcome of the research;
- where the researcher's professional or personal gain arising from the research may be more than might be usual for research.

What to do when your research nears completion …

Submission of Thesis

Approximately three months prior to the submission of your thesis, you need to submit a form on ePortfolio for the approval of your thesis title to your supervisor. Your supervisor will also use this form to begin the process of appointment of your examiners. You are advised to ensure that debts are cleared in advance of submitting this form.

On submission, you will need to provide the following:

- Two soft-bound copies of your thesis,
- A completed Research Degree Examination Entry form, which has a declaration from you regarding your work and which will be used to check that all your financial obligations to the University have been met.
- An electronic copy of your thesis, which may be submitted through plagiarism detection software.
These should be submitted to either the Research Student Support Team (RSST) or the Medical Sciences Graduate School (MSGS)

Once your soft-bound thesis has been received by RSST/MSGS, it will be forwarded to your examiners with copies of regulations and report forms. Your supervisor will arrange the oral examination date, in consultation with the examiners and yourself.

Following your oral examination, RSST/MSGS will inform you of the result of your examination, and give details of any revisions that may be required along with the deadline for your resubmission.

Once you have been informed in writing by RSST/MSGS that the examiners have agreed that you have met all the conditions for your award, you will be asked to submit one hard-bound copy of your completed thesis along with an electronic version. You will also need to complete the Library Deposit Form at this time. When these are submitted to the RSST/MSGS, your passlist will be produced.

**Congregation**

When passlists have been produced, students will be invited to apply to attend at the next available congregation ceremony. Congregations are held in May, July and December each year. Students need to apply to be included in a particular ceremony. For further information on any aspect of Congregations, please refer to the Congregations website: [http://www.ncl.ac.uk/congregations/](http://www.ncl.ac.uk/congregations/) or contact the Congregations Administrator, telephone: 0191 208 6127.