

Code of practice for the assurance of academic quality
and standards in higher education

Section 1: Postgraduate research programmes - September 2004

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Printed copies are available from:

Linney Direct
Adamsway
Mansfield
NG18 4FN

Tel 01623 450788
Fax 01623 450629
Email qaa@linneydirect.com

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Code of practice for the assurance of academic quality and standards in higher education: Postgraduate research programmes

Foreword

- 1 This document is the second edition of a code of practice for postgraduate research programmes provided in UK higher education institutions. It is one of a suite of inter-related documents which forms an overall *Code of practice for the assurance of academic quality and standards in higher education* (the *Code*) for the guidance of higher education institutions subscribing to the Quality Assurance Agency for Higher Education (the Agency).
- 2 The overall *Code* and its 10 constituent sections were originally prepared by the Agency between 1998 and 2001 in response to the reports of the National Committee of Inquiry into Higher Education and its Scottish Committee (the *Dearing and Garrick Reports*). The *Code* supports the national arrangements within the UK for quality assurance in higher education. The *Code* identifies a comprehensive series of system-wide principles (precepts) covering matters relating to the management of academic quality and standards in higher education. It provides an authoritative reference point for institutions as they consciously, actively and systematically assure the academic quality and standards of their programmes, awards and qualifications.
- 3 The *Code* assumes that, taking into account principles and practices agreed UK-wide, each institution has its own systems for independent verification both of its quality and standards and of the effectiveness of its quality assurance systems. In developing the *Code*, extensive advice has been sought from a range of knowledgeable practitioners.
- 4 The *Code* does not incorporate statutory requirements relating to relevant legislation, for example the *Special Educational Needs and Disability Act 2001*. It assumes that institutions have an overriding obligation in all such cases to ensure that they meet the requirements of legislation. However, where a section of the *Code* is related to legislative or similar obligations, efforts have been made to ensure compatibility between them.
- 5 Since 2001 a number of developments in UK higher education have encouraged the Agency to begin a revision of individual sections of the *Code*. In undertaking this task the Agency has also decided to review the structure of the sections and, in particular, to replace the original 'precepts and guidance' format with a 'precepts and explanation' approach, using the explanations to make clear why the precepts are considered important and reducing opportunities for a 'checklist' approach to the *Code*. In doing so the Agency has sought to meet Recommendation 4 (part 4) of the Better Regulation Task Force in its interim report *Higher Education: Easing the Burden*, July 2002.

6 Revised sections of the *Code* are therefore now structured into a series of precepts and accompanying explanations. The precepts express key matters of principle that the higher education community has identified as important for the assurance of quality and academic standards. Individual institutions should be able to demonstrate they are addressing the matters tackled by the precepts effectively, through their own management and organisational processes, taking account of institutional needs, traditions, culture and decision-making. The accompanying explanations show why the precepts are important.

7 The *Code* is a statement of good practice that has been endorsed by the higher education community. As such it is useful in the Agency's audit and review processes that consider the extent to which an institution, in developing and implementing its own policies, has taken account of the *Code* and its precepts.

8 Institutions may find the explanations useful for developing their own policy and for allowing some flexibility of practice at subject level, depending on local needs. It is important to emphasise that the explanations do not form part of the Agency's expectations of institutional practice when Agency teams are conducting audits and reviews.

9 Academic staff in departments and schools do not necessarily need to be aware of the detail of the various sections of the *Code*, although they might well be expected to be familiar with the institutional policies it informs and any parts which are particularly relevant to their own responsibilities.

10 To assist users, the precepts are listed, without the accompanying explanations, in Appendix 1 of this section of the *Code*.

11 The first version of this section of the *Code* was published in January 1999. The publication of this second version follows consultation with staff in institutions, who have helped to update the *Code* to take account of institutions' practical experience of using the guidance contained in its predecessor.

Context

12 This section of the *Code* is written in a firmer style than some other sections, especially the precepts, to give institutions clear guidance on the funding councils', research councils' and Agency's expectations in respect of the management, quality and academic standards of research programmes. Institutions' use of the *Code* is monitored through the Agency's audit and review processes (see paragraph 7 above). In the case of this section, the outputs of these review processes will be used by other agencies, including the UK funding councils, for monitoring purposes.

13 This section of the *Code* is also designed to guide institutions on the development of institutional codes of practice in the area of postgraduate research programmes (see Precept 3 below).

Introduction

14 This revised section of the *Code* was developed by a working group that included representatives from academic institutions, UK funding councils, research councils and national organisations such as the UK Council for Graduate Education, the Society for Research into Higher Education and the National Postgraduate Committee. Institutions, organisations and individuals were invited to comment on a draft version and two 'round table' meetings were held in London and Sheffield as part of the consultation process. All feedback from the consultation process was considered when this section of the *Code* was finalised.

15 Since publication of the first version of this section of the *Code*, there have been many opportunities to seek and receive feedback from institutions on its content and usefulness. Latterly, there have been several publications, including: the Roberts Review of the supply of people with science, technology, engineering and mathematics skills in the UK, culminating in the *SET for success report* (April 2002); the threshold standards for research degree programmes developed by the UK higher education funding councils and published for consultation in *Improving standards in postgraduate research degree programmes* (HEFCE 03/23); and the research councils' and the Arts and Humanities Research Board's (AHRB) joint statement *Skills training requirements for research students* (published as Annex A to HEFCE 03/23). The threshold standards were based on existing practice across UK higher education and institutions generally supported them.

16 Institutions' responses to HEFCE 03/23 also made it clear that they would welcome a single point of reference for good practice in the provision of postgraduate research degrees. As a result, meetings took place between representatives of the funding councils and the Agency to agree how the threshold standards and the skills training requirements might be incorporated within a revised version of this section of the *Code*. The representative working group described above was convened in December 2003, with the remit of producing the single source of reference, as a revised section of the *Code*.

17 In its work, the group has referred to existing documents, including those referred to above and the *Guidelines on the Quality Assurance of Research Degrees* (HEQC, 1996).

Definitions

Research

Research as defined by the funding councils in advance of the 2001 RAE (it has not been changed since then) is quoted below. This definition is applicable in its broadest sense to 'research' when used throughout this document.

'Research for the purpose of the RAE is to be understood as original investigation undertaken in order to gain knowledge and understanding. It includes work of direct relevance to the needs of commerce and industry, as well as to the public and voluntary sectors; scholarship*; the invention and generation of ideas, images, performances and artefacts including design, where these lead to new or substantially improved insights; and the use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes, including design and construction. It excludes routine testing and analysis of materials, components and processes, eg for the maintenance of national standards, as distinct from the development of new analytical techniques. It also excludes the development of teaching materials that do not embody original research.

*Scholarship for the RAE is defined as the creation, development and maintenance of the intellectual infrastructure of subjects and disciplines, in forms such as dictionaries, scholarly editions, catalogues and contributions to major research databases.'

Research students

The precepts and explanations below are intended to cover the many different types of students undertaking research programmes in the UK, including full and part-time, students of all ages and with different needs, UK and international, and from all backgrounds. Not all precepts will be equally applicable to all students and wherever possible, the explanations recognise this.

Research programmes

This document is intended to apply to a wide range of research qualifications. Specifically, it covers the PhD (including the New Route PhD and PhDs awarded on the basis of published work), all forms of taught or professional doctorate, and research master's degrees where the research component (including a requirement to produce original work), is larger than the taught component when measured by student effort. Including such a broad and complex group of programmes means that not all sections of the document apply equally to all types of research programme. In some cases, the explanations are therefore open to flexible interpretation to allow for the diversity that exists across different types of programme.

Precepts and explanations

Institutional arrangements

Institutions offering postgraduate research programmes will safeguard the academic standards of such programmes, putting in place arrangements that will enable them to be delivered successfully according to national and, where relevant, international expectations. They will wish to assure themselves that they provide appropriate support and guidance to enable research students to complete their programmes, and for students, supervisors, examiners and other staff involved in research degree programmes to fulfil their responsibilities, as indicated in other sections of this document.

1
Institutions will put in place effective arrangements to maintain appropriate academic standards and enhance the quality of postgraduate research programmes.

This objective is amplified through the requirements of the other precepts in this section.

2
Institutional regulations for postgraduate research degree programmes will be clear and readily available to students and staff. Where appropriate, regulations will be supplemented by similarly accessible, subject-specific guidance at the level of the faculty, school or department.

Institutional regulations can cover:

- requirements for admission to the programme;
- procedures for considering claims for the accreditation of prior experiential and/or prior certificated learning (AP[E/C]L);
- the academic and procedural requirements for particular postgraduate research awards;
- the requirements for progression, including monitoring and review arrangements for the award and the minimum and maximum periods within which the programme may be completed;
- assessment methods, requirements and procedures, including the criteria for achieving the award;
- the institution's procedures for dealing with research misconduct, including plagiarism;
- complaints and appeals processes.

Institutions will wish to review such regulations regularly and update them when necessary, to take account of developments and innovation.

3
Institutions will develop, implement and keep under review a code or codes of practice applicable across the institution, which include(s) the areas covered by this document. The code(s) should be readily available to all students and staff involved in postgraduate research programmes.

Institutions should use both external and internal guidance when developing their own codes of practice for research programmes. Such codes are considered an integral part of institutional quality assurance mechanisms and are valuable in assuring the quality and maintaining academic standards of research programmes. Guidance at faculty, school or departmental level, for example in handbooks, can provide useful additional advice for students and staff.

Institutions will wish to bring their codes of practice to the attention of students as early as possible, and certainly no later than induction.

4
Institutions will monitor the success of their postgraduate research programmes against appropriate internal and/or external indicators and targets.

Institutions have their own views of what defines success in the broad subject areas in which research programmes are undertaken, where appropriate guided by national and international expectations. In setting targets and monitoring indicators, institutions will wish to take into account the different needs and study patterns of different types of students and the diversity of their research programmes.

Factors that an institution may consider when collecting evidence to evaluate the success of its postgraduate research degree programmes (normally as part of an annual monitoring process) may include:

- submission and completion times and rates;
- pass, referral and fail rates;
- withdrawal rates;
- the number of appeals and complaints, the reasons for them, and how many are upheld;
- analysis of comments from examiners;
- recruitment profiles;
- feedback from research students, employers, sponsors and other external funders;
- information on employment destinations and career paths of former students.

There should be formal opportunities for institutional, faculty and departmental committees and groups to consider statistical and other information relating to postgraduate research programmes and to act upon it. Student involvement in these processes is beneficial.

The research environment

In each research environment a range of factors, appropriate to the subject and types of students and research programmes involved, and including one or more of the examples below, can be used to demonstrate 'high quality'. National and international reference points also provide subject-specific benchmarks appropriate to individual disciplines.

5

Institutions will only accept research students into an environment that provides support for doing and learning about research¹ and where high quality research is occurring.

Examples of factors that can be used to indicate high quality research include:

- demonstrable research achievement/output in the subject, such as: journal publications; books; work produced in other media, including performing arts, sculpture, fine art and design;
- sufficient numbers of staff, including post-doctoral researchers, and research students (either within the institution or included in collaborative arrangements);
- clinical research achievements;
- knowledge transfer and the application of research techniques and solutions to practical problems (such as those funded by employers);
- in some research environments, the ability to attract external funding.

Emergence of new research groups normally occurs within an environment that demonstrates research of high quality is already being achieved.

The research environment, which may be located in or across one or more institutions, will be adequate for the conduct of the kind of research in question and capable of supporting the type and range of students being recruited, and their changing needs and requirements as the programme develops. The environment should be enabling and instructional, and be conceived of as a place of learning as well as of research productivity.

Features of an environment well suited for doing and learning about research (see a below), are supported by other characteristics that encourage research achievement (see b, page 8). There are some other features that help to assure the quality of the research environment (see c, page 9).

- a An appropriate environment in which to do and learn about research might include:
- opportunities and encouragement to exchange and develop ideas with people at appropriate levels who are also engaged in doing and learning about research and pursuing established research programmes;

¹ Please see the definition of 'research' at the beginning of the document.

Postgraduate research programmes

- ready access to academic colleagues and others able to give advice and support;
- adequate learning and research tools including access to IT equipment, library and electronic publications;
- opportunities for students to develop peer support networks where issues or problems can be discussed informally (this could include access to social space provided for the purpose);
- supervision (see also the section on Supervision below) that encourages the development and successful pursuance of a programme of research;
- guidance on the ethical pursuit of research and the avoidance of research misconduct, including breaches of intellectual property rights;
- an emphasis on the desirability of developing: research-related skills that contribute to the student's ability to complete the programme successfully (including, where appropriate, understanding related to the funding of research and its commercial exploitation) (eg Appendix 3 A - C); personal and, where relevant, employment-related skills (eg Appendix 3 D - G);
- availability of advice on career development, where relevant.

Such a learning environment will also enable research students to make judgements requiring creativity and critical independent thought, accepting that uncertainty is a feature of the conduct of research programmes. This environment should enable students to grapple with challenges that develop intellectual maturity and encourage a high level of reflection on the student's own learning about research as well as on research outcomes. Institutions that fund or otherwise support postgraduate-run initiatives, for example journals, conference organisation and attendance, often find this valuable in helping students develop professional skills.

b Components of an environment supportive of research achievement might include:

- the pursuit of high quality research in cognate areas by a community of academic staff and postgraduates;
- supervisors with the necessary skills and knowledge to facilitate the successful completion of students' research programmes;
- access to the facilities and equipment necessary to enable students to complete their research programmes successfully.

Institutions will wish to put in place explicit expectations that are clear and readily accessible to students and supervisors concerning timely submission and successful completion periods. Such expectations are likely to be influenced by research council requirements where relevant, and by the mode of study of the student, ie full-time or part-time. They are also likely to vary according to the needs of subjects and individual students.

- c In addition, institutions may wish to provide:
- access to welfare and support facilities that recognise the particular nature of research degree study;
 - the opportunity for effective student representation, and for addressing students' feedback including complaints;
 - sufficient implementation and monitoring mechanisms to ensure that where a project is undertaken in collaboration with another organisation, the standards of both organisations are maintained².

Selection, admission and induction of students

Precepts and explanations six to 10 below, and the accompanying explanations, highlight to all concerned the importance of clear admissions and induction procedures and requirements, and the need for fair and consistently applied admissions policies.

6

Admissions procedures will be clear, consistently applied and will demonstrate equality of opportunity.

Institutions will make clear and accurate admissions information readily available to applicants and staff involved in the admissions process. Institutions are advised to make this information available on their web site and in printed form.

Institutions should also make provision for staff responsible for admissions to be aware of and understand legal requirements relating to the processes and the need to conform to such legislation. In respect of equal opportunities requirements, institutions will wish to put in place monitoring arrangements to satisfy themselves that:

- appropriate attention is paid to legislation and guidance available internally and externally;
- an effective support infrastructure is in place for students with special needs;
- students are made aware of opportunities to apply for additional or special funding and how to apply for such funds.

7

Only appropriately qualified and prepared students will be admitted to research programmes.

Students will be expected to have a sufficient level of English language competence. This should be identified by a process that is consistently applied by the institution. For doctoral research, students will be expected to have one or more of the following:

- a degree, normally with class 2 (i) or equivalent in a relevant subject;
- a relevant master's qualification or equivalent;

²See also Section 2 of the *Code on Collaborative provision and flexible and distributed learning (including e-learning)*

- evidence of prior professional practice or learning that meets the institution's criteria and good practice guidelines for the accreditation of prior experiential and/or certificated learning (AP[E/C]L).

8

Admissions decisions will involve at least two members of the institution's staff who will have received instruction, advice and guidance in respect of selection and admissions procedures. The decision-making process will enable the institution to assure itself that balanced and independent admissions decisions have been made, that support its admissions policy.

The instruction, advice and guidance provided by institutions will enable those involved in admissions decision-making to fulfil their role effectively and efficiently. Admissions staff will need to consider how interviews with applicants might be used as part of the admissions process (including arrangements for assessing the suitability of those based overseas and working at distance).

In addition to familiarising selectors with the institution's admissions policies, institutional guidance will normally cover the use of references and other information used to assess the suitability of a candidate to undertake postgraduate research.

Institutions will wish to put in place suitable criteria for assessing student qualifications and preparedness, including consideration of any claims made for the accreditation of prior learning gained through professional practice or other appropriate work experience or study.

Important factors to be considered are the student's motivation and potential to complete the programme.

The student's ability to complete the programme may be affected by financial support, and for this reason institutions may wish to assure themselves that students have sufficient funding in place for the duration of the programme. It is equally important to ensure that students are made aware at the earliest opportunity of the financial implications of registering for the programme.

Guidance provided by institutions should enable selectors to be aware of issues concerning international students, including the assurance of language proficiency and the importance of providing opportunities for candidates to improve their language proficiency by taking advantage of in-house or other training. Staff and applicants will need to be aware of the minimum proficiency levels set by the institution, with appropriate reference to external guidance (such as that provided by the International English Language Testing System (IELTS)).

For quality assurance purposes and to help selectors, institutions should provide clear guidance on the balance of responsibilities between staff in local units and central postgraduate administration.

9

The entitlements and responsibilities of a research student undertaking a postgraduate research programme will be defined and communicated clearly.

The institution's offer to successful candidates for research degrees will normally be expressed in a formal letter that is specific to the individual applicant. This constitutes a contract between the student and the institution. The terms of the letter are binding on the institution and, upon acceptance, on the student. The letter will normally refer to or enclose other information, for example references to institutional web pages, supplemented by printed information where necessary. The letter and enclosures normally refer to:

- the expected total fees, including extra charges (such as 'bench' fees) which will be levied, and any other expenditure on practical items relevant to the individual student;
- the expected period of study for which the student is enrolled;
- the requirements which the institution places upon the research student (for example, attendance, progress reports, contact with supervisors) and arrangements for enrolment and registration;
- references to the institution's regulations, student handbook, sources of funding and other relevant information for a research degree programme, all of which will normally be available via institutional web pages;
- the responsibilities being accepted by the student for their academic studies and candidacy for a research degree;
- if known, the requirements and conditions of any sponsor;
- an outline of any opportunities to undertake teaching or other duties and any conditions associated with these (for example training for teaching), to be defined in principle at the beginning of the student's programme unless already part of his/her funding arrangements;
- reference to practical information, for example concerning accommodation and financial or travel information.

Other information can be provided separately, perhaps as part of the induction process. For example, handbooks (printed or electronic) may include details of health and safety procedures, regulations concerning plagiarism and good practice in research, and guidance on research ethics. It is also important that students are aware of the institution's expectations of them in relation to personal conduct and academic performance.

The institution's policies, practices and requirements with respect to intellectual property rights (including arrangements, where relevant, with external commercial or industrial organisations with their own intellectual property rights arrangements) will need to be clearly expressed to applicants and any relevant third party.

Institutions should assure themselves that students are made aware of their responsibilities at the beginning of their programme. Students' responsibilities normally include:

- taking responsibility for their own personal and professional development;
- maintaining regular contact with supervisors (joint responsibility with supervisors);
- preparing adequately for meetings with supervisors;
- setting and keeping to timetables and deadlines, including planning and submitting work as and when required and generally maintaining satisfactory progress with the programme of research;
- making supervisors aware of any specific needs or circumstances likely to affect their work;
- attending any development opportunities (research-related and other) that have been identified when agreeing their development needs with their supervisors (see explanation with precept 10 below);
- being familiar with institutional regulations and policies that affect them, including the regulations for their qualification, health and safety, intellectual property, and ethical research guidelines (see also Precept 5 [a] above and the bullet points under Precept 10 below).

10

Institutions will provide research students with sufficient information to enable them to begin their studies with an understanding of the academic and social environment in which they will be working.

Institutions will ensure that an induction programme, the timing and content of which reflects the diversity of needs of specific groups of research students (including part-time and newly arriving international students), is delivered at the most appropriate levels (institution/faculty/school/department, or a combination).

The information to be provided as part of the induction programme can usefully include:

- general information about the institution and its postgraduate portfolio in the relevant subject(s);
- the institution's registration, enrolment, appeals and complaints procedures, assessment requirements and research degree regulations;
- the names and contact details of the student's supervisor(s) and information about how supervisory arrangements work;

- the institution's research ethics and codes and those of relevant professional bodies and discipline groups, including consideration of issues concerning authorship and intellectual property;
- the institution's expectations of the independence and responsibilities of the student;
- student support and welfare services such as counselling and advice centres;
- a summary of the facilities that will be made available to the student, including the learning support infrastructure;
- relevant health and safety and other legislative information;
- where appropriate, a brief outline of the proposed research programme(s), together with the normal length of study and the facilities that will be made available to the student;
- reference to the challenges that will typically face research students during the course of their studies and where guidance may be sought in the event of difficulties;
- any opportunity for the student representative body to introduce themselves, including specific postgraduate representation;
- social activity, including that provided specifically for postgraduates;
- opportunities for postgraduates to be represented by the student body;
- details about opportunities and requirements for skills development.

It can be helpful if institutions provide students with an introductory pack, providing details about where they can find essential information.

Other information is likely to include details of supervision arrangements, including evaluation, monitoring and review procedures. During the induction process, students will be provided with details of opportunities that exist for meeting other research students and staff, and for developing scholarly competence and independent thought.

The student should meet his/her supervisor at the earliest opportunity, to agree on their plans for the programme including the following:

- the initial objectives of the research, taking account of the sponsor's requirements where appropriate;
- the development and general educational needs of the student, measured against the research councils Joint Skills Statement if appropriate;
- the means by which the student will communicate progress to the supervisor(s) and how they will arrange regular meetings;
- monitoring of progress in the research and training aspects of the programme.

(See also the section on Supervision below)

Supervision

It is important to establish systematic and clear supervision arrangements. These include: the need to provide students with opportunities for access to regular and appropriate supervisory support; encouragement to interact with other researchers; advice from one or more independent source (internal or external); and arrangements that protect the student in the event of the loss of a supervisor.

These four principles are covered in more detail by the following precepts. They provide a framework for the minimum standards required by institutions in providing supervisory arrangements for research students.

11

Institutions will appoint supervisors who have the appropriate skills and subject knowledge to support, encourage and monitor research students effectively.

All supervisors need appropriate expertise for their role. They will wish, and institutions will require them, to engage in development of various kinds to equip them to supervise students.

New supervisors will participate in specified development activities, arranged through their institutions, to assure their competence in the role.

Institutions will expect existing supervisors to demonstrate their continuing professional development through participation in a range of activities designed to support their work as supervisors. Supervisors should take the initiative in updating their knowledge and skills, supported by institutional arrangements that define and enable sharing of good practice and provide advice on effective support for different types of student. Mentoring relationships are one example of how support can be provided for supervisors.

To assure consistency of supervision, institutions will wish to encourage supervisors working in industry or professional practice to participate as appropriate in any developmental activities offered by the institution.

12

Each research student will have a minimum of one main supervisor. He or she will normally be part of a supervisory team. There must always be one clearly identified point of contact for the student.

Supervision arrangements will depend on the structure for research student support that exists within the institution and any guidance provided by the relevant research council, where appropriate.

Involvement with a supervisory team can provide valuable staff development and grounding in the skills required to become an effective research supervisor. A supervisory team can give the student access to a multi-faceted support network, which may include: other research staff and students in the subject; a departmental

adviser to postgraduate students; a faculty postgraduate tutor; or other individuals in similar roles.

Between them, the main supervisor and, where relevant, other members of the supervisory team, will ensure that research students receive sufficient support and guidance to facilitate their success.

At least one member of the supervisory team will be currently engaged in research in the relevant discipline(s), so as to ensure that the direction and monitoring of the student's progress is informed by up to date subject knowledge and research developments.

Breadth of experience and knowledge across the supervisory team will mean that the student always has access to someone with experience of supporting research student(s) through to successful completion of their programme.

In all cases, a student should have an identified single point of contact, normally the main supervisor. It should be clear to the student who the relevant contact is if the main supervisor is not available. This will normally be an additional, designated member of academic staff able to provide advice and support. To avoid misunderstandings, the names, contact details and responsibilities of the main and any other supervisor(s) should be provided to students at registration and be readily available throughout their programme.

As and when a main supervisor is not able to continue supervising the student, an appropriate supervisor will be appointed to assume the role.

Institutions will wish to take a view on how long a main supervisor may be absent before a permanent replacement is appointed. In determining this period, institutions will be influenced by the importance of providing breadth and continuity of supervision for the student. In some circumstances, it will be appropriate for another supervisor to assume the role of main supervisor, while a replacement main supervisor is found.

It is important that, if a student/supervisor relationship is not working well, alternative independent sources of advice are available to the student. By mutual agreement between the student and the institution, and where permitted by the terms of any sponsorship agreement, supervisory responsibilities can be changed, at the request of either the student or a supervisor.

Students will have sufficient opportunities for contacting and receiving advice and guidance from their supervisor(s) throughout their programme, irrespective of their geographical location. Reasonable accessibility of supervisors is a priority and institutions should assure themselves that students and supervisors are aware of its importance.

13

Institutions will ensure that the responsibilities of all research student supervisors are clearly communicated to supervisors and students through written guidance.

It is important that supervisor(s) and student are fully aware of the extent of one another's responsibilities, to enable both to understand the supervisor's contribution to supporting the student and where the supervisor's responsibilities end.

Depending on institutional and research council guidance, supervisory responsibilities may include:

- providing satisfactory guidance and advice;
- being responsible for monitoring the progress of the student's research programme;
- establishing and maintaining regular contact with the student (where appropriate, guided by institutional expectations), and ensuring his/her accessibility to the student when s/he needs advice, by whatever means is most suitable given the student's location and mode of study;
- having input into the assessment of a student's development needs;
- providing timely, constructive and effective feedback on the student's work, including his/her overall progress within the programme;
- ensuring that the student is aware of the need to exercise probity and conduct his/her research according to ethical principles, and of the implications of research misconduct;
- ensuring that the student is aware of institutional-level sources of advice, including careers guidance, health and safety legislation and equal opportunities policy;
- providing effective pastoral support and/or referring the student to other sources of such support, including student advisers (or equivalent), graduate school staff and others within the student's academic community;
- helping the student to interact with others working in the field of research, for example, encouraging the student to attend relevant conferences, supporting him/her in seeking funding for such events; and where appropriate to submit conference papers and articles to refereed journals;
- maintaining the necessary supervisory expertise, including the appropriate skills, to perform all of the role satisfactorily, supported by relevant continuing professional development opportunities.

Supervisors will be sensitive to the diverse needs of individual students, including international students, and the associated support that may be required in different circumstances. An awareness of the range of support available (as referred to above), and how students can access it, is an important part of the supervision process.

Institutions will ensure that students and supervisors always have access to relevant documents concerning the above responsibilities: electronically, in paper form, or both.

Institutions may find it helpful to include in their code(s) of practice (see Precept 3 above), guidance on the minimum frequency of contact advisable between students and supervisors. Such codes can also include details of procedures for dealing with extensions and suspensions of study, which students and supervisors may find helpful.

14

Institutions will ensure that the quality of supervision is not put at risk as a result of an excessive volume and range of responsibilities assigned to individual supervisors.

In appointing supervisors, institutions need to be aware of and guided by the overall workload of the individual, including teaching, research, administration and other responsibilities, for example, external examining duties and other professional commitments, such as consultancy or clinical responsibilities. Institutions are encouraged to find ways of showing their support for supervisors' valuable contribution to the research environment.

Supervisors need time to provide adequate contact with each research student and to fulfil the responsibilities listed under Precept 13 above. Supervisors and students should agree between themselves the level of interaction required and what constitutes sufficient time, in terms of quality as well as quantity, to devote to the supervisory role.

When a student needs advice or guidance, supervisors should be able to respond within a reasonable timescale.

Progress and review arrangements

Regular and structured interaction is necessary between students and supervisors, as part of the support provided to enable students to progress satisfactorily. Institutions should make it as easy as possible for students and supervisors to be aware of the requirements of the progress and review process, including knowledge of their respective responsibilities.

Precepts 15, 16 and 17 below cover all types of review of student progress, including meetings that take place between the student and the supervisor(s), and other individuals, such as members of an annual review panel. There are two distinct types of review: meetings that deal with formal review of the student's progress and forward planning, and informal meetings where the student and members of the supervisory team meet to discuss general matters. Both are covered below.

15

Institutions will put in place and bring to the attention of students and relevant staff clearly defined mechanisms for monitoring and supporting student progress.

The main purpose of the monitoring process is to provide overall support for the student to complete the research programme successfully within an appropriate timescale. The purpose and frequency of monitoring arrangements need to be clear from the outset, so that both the student and the supervisor can plan adequately for them, prepare relevant documents and consult other individuals as appropriate. Should a student's progress not be satisfactory, the monitoring process should include ensuring that support is available for the student to make improvements.

Arrangements made between the student and supervisor may allow some flexibility, if both are satisfied that adequate support is being provided for the student and there are sufficient opportunities for formally monitoring progress. As well as providing opportunities for formal interaction, institutions should make it clear that students and supervisors are expected to meet informally, and frequently enough to address the student's need for general guidance.

Students and supervisors are jointly responsible for ensuring that regular and frequent contact is maintained and there will be times when the student, as well as the supervisor, needs to take the initiative. The nature and frequency of contact between student and supervisor(s) will vary, depending on the duration of the programme, the way the research is being conducted and the amount of support needed by the student.

Taking account of these variables, the following should be agreed by and clear to both student and supervisor(s) from the start of the programme:

- the minimum frequency of scheduled meetings between student and supervisor, or supervisory team, and the purpose of such meetings;
- guidance on the nature and style of the student/supervisor interaction, including discussions about academic and personal progress.

Institutions will wish to put in place opportunities for seeking independent advice should the student/supervisor relationship break down, and to ensure that students are aware of these (see also Precept 12 in the section on Supervision above)

16

Institutions will put in place and bring to the attention of students and relevant staff clearly defined mechanisms for formal reviews of student progress, including explicit review stages.

Institutions will wish to establish processes for reviewing student progress involving individuals independent of the supervisor(s) and the student. Such

processes will operate less regularly than meetings between student and supervisor(s) and may involve, for example, an annual review by a panel or other institutionally specified body such as a research degrees committee. A significant progress review would normally be undertaken at specific points in a research student's programme, for example when completing probationary periods of training or transferring from a research master's to a doctoral degree. The student should be present at the review.

The target dates of expected review stages throughout the programme, such as those referred to above, should be agreed by and clear to both student and supervisor(s).

Institutions will wish to assure themselves that the following are clear to students and supervisors from the beginning of the programme:

- the implications of the possible outcomes of review meetings;
- the criteria to be used for making decisions about the extension, suspension or termination of a student's registration;
- the circumstances in which student appeal mechanisms may be used.

Institutional regulations will specify the minimum and maximum periods within which the student can complete the research programme. Bearing these in mind, decisions about transferring the student's registration to a doctoral qualification should take place when there is sufficient evidence to assess the student's performance. This may be part of the annual review process. The student will normally provide as a minimum a written submission, considered by a panel that includes the student's main supervisor, and some members who are independent of the supervisory team. In most cases there is likely to be an oral presentation by the student, with questions put by panel members.

17

Institutions will provide guidance to students, supervisors and others involved in progress monitoring and review processes about the importance of keeping appropriate records of the outcomes of meetings and related activities.

Guidance in this area might take the form of advice about the kind of records that need to be kept in relation to different types of meeting and review. For example, the information that is recorded after an informal meeting that takes place regularly between the student and his/her supervisor is likely to be different from and less detailed than the formal record of a meeting to consider an application to transfer to a doctoral degree or a meeting of an annual review panel. In some institutions it is considered good practice for students to keep the record of regular, 'routine' meetings with supervisors. Supervisors, as well as students, should keep copies of records of supervisory meetings

Institutional guidance on record keeping should be easily accessible at all times to students, supervisors and others involved in the progress and review processes. This

may be facilitated by the introduction of electronic logs, such as can be made available through institutional portals, perhaps as part of personal development planning (PDP).

Development of research and other skills

The importance of acquiring research and other skills during research degree programmes is recognised by students, academic staff, sponsoring organisations, employers and former students. These skills improve the student's ability to complete the research programme successfully. Development and application of such skills is also understood to be significant in the research graduate's capability for sustaining learning throughout his or her career, whether in an academic role, or in other employment. Research students are encouraged to recognise the value of transferable skills in enabling them to take ownership and responsibility for their own learning, during and after their programme of study.

18

Institutions will provide research students with appropriate opportunities for personal and professional development.

Research students need support to develop the research, subject specific, communication, and other skills they require to become effective researchers, to enhance their employability and assist their career progress after completion of their degree. These skills may be present on commencement (for example in the case of some mature students), explicitly taught, or developed during the research programme.

In providing research students with opportunities for developing personal and research skills, institutions will wish to pay particular attention to the differing needs of individual postgraduates, arising from their diversity. It is expected that a range of mechanisms will be used to support learning and that they will be sufficiently flexible to address those individual needs. For example, the development needs of research students already employed to undertake research may be different from those of other students. The emphasis in formal training should be on quality, relevance and timeliness.

Institutions will wish to consider embedding opportunities for skills development in research degree programmes. Depending on the needs of the subject and the student, personal and professional development opportunities for research students will either be spread across the duration of the research degree or will be provided at the beginning of the programme, the aim being to maximise the effectiveness of training in developing skills, both research and generic.

In deciding which elements of research and skills development to make mandatory, institutions will wish to take into account advice from research councils and other sources. It will not necessarily be appropriate for all students to undertake such development; for example, mature students who may be studying for their own interest in the subject may not need to acquire skills for employment.

To ensure students' needs are being met, institutions will find it helpful to review on a regular basis the training in research and generic skills provided for their students, as part of the quality assurance mechanisms for research programmes.

Opportunities for skills development can be provided either by the institution offering the student's research programme, or by other institutions, perhaps through regional or other collaboration.

19

Each student's development needs will be identified and agreed jointly by the student and appropriate academic staff, initially during the student's induction period; they will be regularly reviewed during the research programme and amended as appropriate.

The research councils and the AHRB play an important role in setting standards and identifying best practice in research training. In their joint statement *Skills training requirements for research students* (attached at Appendix 3), they have set out the skills that doctoral research students they funded are expected to have on completion of their programmes.

Institutions will wish to use their experience of structured training and education to establish personal and professional development opportunities for the benefit of students. The extent to which research students are required to take advantage of these opportunities will normally be negotiated through the supervision process, taking account of subject and individual needs.

Where postgraduate students are provided with opportunities for teaching (for example, acting as demonstrators in laboratories, or teaching small groups), appropriate guidance and support will be provided. If the student's teaching activity also extends to assessing students, training will reflect this. It is helpful for postgraduates to be part of a larger teaching team, so they can benefit from the support and mentoring provided by experienced teachers.

20

Institutions will provide opportunities for research students to maintain a record of personal progress, which includes reference to the development of research and other skills.

It is accepted as good practice for students to reflect on their learning, supported by frameworks developed by institutions for recording personal development. National guidelines (currently *Guidelines for Higher Education Progress Files*), suggest that PDP for students should operate across the whole higher education system. Research students may find it useful to use the PDP tools provided by their institutions to record their personal progress and development, including reference to research and other skills. Planning for skills development and checking that

necessary guidance and support has been provided should form part of the process of personal development planning.

Students who, on entry to the research programme, are unfamiliar with keeping records of their progress and development are likely to need additional guidance and support.

Institutions may also wish to implement some form of recognition of the acquisition of transferable skills in parallel with, or as part of, the academic assessment of the student's progress.

Feedback mechanisms

Collecting and acting upon feedback from students, staff, examiners and others involved in research programmes is a fundamental part of the quality assurance process, at institutional and subject levels. Precept 21 and accompanying text outline how institutions may wish to approach this activity.

21

Institutions will put in place mechanisms to collect, review and, where appropriate, respond to feedback from all concerned with postgraduate research programmes. They will make arrangements for feedback to be considered openly and constructively and for the results to be communicated appropriately.

Institutions will wish to establish and operate constructive feedback procedures that are as representative as possible of the views of all those involved. These include feedback mechanisms for:

- current students and recently completed research degree graduates;
- supervisors, review panels and internal examiners;
- research administrators;
- external parties, including external examiners, sponsors, collaborating organisations, employers and, where possible, alumni.

(See also list of suggested evaluation factors in bullet points accompanying Precept 4 above)

Separate arrangements should exist for obtaining individual and collective feedback, for example through a student forum. Individual feedback mechanisms should enable students to provide confidential views if they wish.

Institutions should use the feedback in an appropriate format in their quality assurance processes, as part of the regular review of academic standards. The feedback and review cycle should normally occur at least annually.

Information about action taken in response to feedback should be made easily and promptly available to those involved.

Assessment

Assessment processes for research qualifications are quite different from those for taught awards and usually include some kind of oral examination. The following three precepts and explanations address the most important elements of assessment for research students and qualifications.

22

Institutions will use criteria for assessing research degrees that enable them to define the academic standards of different research programmes and the achievements of their graduates. The criteria used to assess research degrees must be clear and readily available to students, staff and external examiners.

In setting criteria for assessing different types of research programmes, institutions will wish to refer to the qualification descriptors for doctoral and master's degrees in the *Frameworks for Higher Education Qualifications* (or their equivalent). They will also find it helpful to refer to the qualification nomenclature in these documents, including the guidance on the use of titles for research programmes of different kinds. Thought will also need to be given to the assessment criteria to be used in different subjects such as the performing or visual arts and for different types of research programmes, including professional doctorates and doctorates by published work.

Applying assessment criteria for postgraduate research degrees helps institutions to safeguard the academic integrity of such programmes and awards, internally and externally. Making assessment criteria available to research students will give them the insight they need into what the institution expects. Criteria should enable students to show the full extent of their abilities and achievements at the level of the qualification they are aiming for. Practical advice for students is also helpful, for example on word limits and what is meant by 'originality' and other similar terms.

When making an award at a different level from the qualification for which the student has been assessed (for example giving a master's award to a PhD candidate), institutions will wish to use assessment criteria that enable examiners to confer the alternative award for positive achievement by the student.

23

Research degree assessment procedures must be clear; they must be operated rigorously, fairly, and consistently; include input from an external examiner; and carried out to a reasonable timescale.

Although there is some variation between institutions and between different types of research degree, the most common features of research degree assessment procedures in the UK system are as follows:

- the student is examined on the basis of an appropriate body of work and an oral examination (viva voce);

- as a minimum, two appropriately qualified examiners are appointed for the purpose, at least one of whom is external to the institution. Where more than two examiners are appointed, the majority are generally from outside the institution;
- none of the student's supervisors should be appointed as an examiner;
- it is exceptional to appoint as internal or external examiner researchers who have had a substantial direct involvement in the student's work or whose own work is the focus of the research project;
- examiners submit separate, independent written reports before the viva and a joint report after it.

In meeting this precept the institution will want to consider carefully:

- a The criteria to be used in appointing examiners, including how many examiners are to be appointed. Some institutions appoint additional external examiners where the research student is also a member of staff or in cases where the thesis is highly interdisciplinary. Other issues include how to establish that the examiners have relevant qualifications and experience and a clear understanding of the task; in what circumstances and with what support an inexperienced examiner might be appointed; and what guidance is to be given to the examiners.
- b The preparatory period prior to the viva. Institutions will wish to consider ways of making sure that the examiners have the information and conditions they need to identify the areas to be explored at the viva. Those institutions which do not at present ask their examiners to produce separate reports might consider whether to change their practice. Thought needs to be given to the procedures for handling such reports, including to whom they should be submitted and when.
- c The way in which the viva is to be conducted. Institutions will wish to satisfy themselves that processes enable the viva to meet agreed criteria for fairness and consistency. Some institutions now appoint an independent, non-examining chair: this is thought to be good practice, not least in ensuring consistency between different vivas and in providing an additional viewpoint if the conduct of the viva should become the subject of a student appeal. Where the appointment of an independent chair is not feasible, institutions should find alternative ways of assuring fairness and consistency, acceptable to the student, that enable them to know the viva is conducted in an appropriate manner. Institutions might also consider whether the student's supervisor should be present, with the student's agreement, and if so on what basis; whether other people should be present (eg current research students); and whether it would be helpful to ask for an account of how the viva was conducted.
- d How to handle cases where the examiners are unable to reach a consensus view on the outcome.
- e How and when the result is to be communicated to the student. This will involve: giving thought to the range of assessment outcomes open to the examiners, including referral, or awarding a qualification different from the one

for which the student has been examined; the nature and source of guidance to be given if a student is asked to revise and re-submit the thesis; and the various parties who need to be notified of the result (eg the student's sponsor).

- f The criteria to be used for selecting external examiners when they have had previous affiliations with the awarding institution.

The institution will also need to consider how it assures itself that the research programme assessments carried out in its name meet the criteria set out in this precept. For example, it may want to have a system for reading the examiners' report(s) similar to that in place for reading external examiners' reports at undergraduate and taught master's levels. Additionally, it may also want to keep a 'log' to ensure that the process is being conducted promptly: undue delay is unfair to the student.

24

Institutions will communicate their assessment procedures clearly to all the parties involved, ie the students, the supervisor(s) and the examiners.

The main official source of information on research degree assessment is often the institution's regulations. These are often written in semi-legal language, because they may be used in formal complaints and appeals processes. The institution may therefore need to supplement regulations to provide students and staff with a clear understanding of the assessment process and its implications. In doing so, it may help to think through the process as the student experiences it. This will include providing detailed information on timings and deadlines; the assessment process itself; the time taken to reach a decision; and the potential outcomes of the assessment.

In particular, students should be warned of the penalties for plagiarism, and should be reminded of the significance of declaring that the material being presented for examination is their own work.

The viva can be an especially challenging event in the research student's career, and s/he may well need support in preparing for it. The institution will want to consider providing written guidance and/or making arrangements for the student to undergo a 'mock' viva, or other, similar experience.

Institutions will also need to think about whether, and if so when, students should routinely be given copies of the report and, if so, whether this should be the final report only or the final report and the separate independent reports prepared before the viva. Depending on the institution's policy in this respect, examiners may need to be informed in advance that their reports will be made available to the candidate. Whatever the institution's agreed procedure, it should be applied consistently in all cases to assure equality.

Student representations

It is in the interests of students and institutions to resolve problems at an early stage. To facilitate this, institutions should ensure that students and staff know the difference between informal ways of making representations and routes they can use to make formal complaints or appeals. It is also important to distinguish between complaints, which are defined as being representations about general matters (including conduct), and appeals, which are against specific outcomes or decisions. Institutions are advised to develop their own definitions of complaints and appeals, and generally to assure themselves that staff and students are aware of the different types of representations and procedures.

25

Institutions will put in place and publicise procedures for dealing with student representations that are fair, clear to all concerned, robust and applied consistently. Such procedures will allow all students access to relevant information and an opportunity to present their case.

Institutional procedures for addressing student representations at various levels (institution/faculty/school/department), will be clearly and openly publicised to research students. They will apply equally to all research students, including those who are part-time, off site, registered on collaborative programmes or on visiting programmes. Students should be made aware of the final stage in any complaint or appeal, if all other possibilities have been exhausted, including the opportunity to make representations to the Office of the Independent Adjudicator for Higher Education, which provides an independent scheme for the review of student complaints and appeals.

The importance of resolving any problems at an early stage should be made clear to students and staff. All concerned should be made aware of the stages and processes, informal and formal, through which representations can be made.

Institutions will assure themselves that schools/departments have accessible mechanisms that apply when students are not able to resolve difficulties informally with their supervisor(s). Impartial person(s) with suitable experience (whose role should be widely publicised) will be appointed, to whom students can take their complaints. This is essential to assist in resolving problems at an early stage.

Complaints

26
Independent and formal procedures will exist to resolve effectively complaints from research students about the quality of the institution's learning and support provision.

Institutions will wish to implement complaints procedures that are appropriate for use by research students.

These should include an indicative timetable for dealing with different types of complaints: some may need to be dealt with more quickly than others.

The need for students to discharge their responsibilities in relation to pursuing a formal complaint will be highlighted. On receipt of a formal complaint, students will be informed promptly of the actions that will be taken.

Appeals

27
Institutions will put in place formal procedures to deal with any appeals made by research students. The acceptable grounds for appeals will be clearly defined.

All appeals procedures will be clear, impartial, and well publicised to protect the rights of all those concerned. They should be dealt with fairly and in a timely manner.

Institutions will wish to define clearly the grounds for an appeal and how to lodge an appeal. This information will be clearly communicated to all research students. Further to this there should be clear explanation of the appeals process including:

- how decisions are taken to grant an appeal hearing;
- the constitution of an appeal panel, and the relation of its members to those involved in the original assessment decision;
- how records are maintained of an appeal hearing;
- the mechanisms for communicating the results of an appeal hearing to interested parties.

Appendix 1

The Precepts

Institutional arrangements

1
Institutions will put in place effective arrangements to maintain appropriate academic standards and enhance the quality of postgraduate research programmes.

2
Institutional regulations for postgraduate research degree programmes will be clear and readily available to students and staff. Where appropriate, regulations will be supplemented by similarly accessible, subject-specific guidance at the level of the faculty, school or department.

3
Institutions will develop, implement and keep under review a code or codes of practice applicable across the institution, which include(s) the areas covered by this document. The code(s) should be readily available to all students and staff involved in postgraduate research programmes.

4
Institutions will monitor the success of their postgraduate research programmes against appropriate internal and/or external indicators and targets.

The research environment

5
Institutions will only accept research students into an environment that provides support for doing and learning about research¹ and where high quality research is occurring.

Selection, admission and induction of students

6
Admissions procedures will be clear, consistently applied and will demonstrate equality of opportunity.

¹Please see the definition of 'research' at the beginning of the document.

7
Only appropriately qualified and prepared students will be admitted to research programmes.

8
Admissions decisions will involve at least two members of the institution's staff who will have received instruction, advice and guidance in respect of selection and admissions procedures. The decision-making process will enable the institution to assure itself that balanced and independent admissions decisions have been made, that support its admissions policy.

9
The entitlements and responsibilities of a research student undertaking a postgraduate research programme will be defined and communicated clearly.

10
Institutions will provide research students with sufficient information to enable them to begin their studies with an understanding of the academic and social environment in which they will be working.

Supervision

11
Institutions will appoint supervisors who have the appropriate skills and subject knowledge to support, encourage and monitor research students effectively.

12
Each research student will have a minimum of one main supervisor. He or she will normally be part of a supervisory team. There must always be one clearly identified point of contact for the student.

13
Institutions will ensure that the responsibilities of all research student supervisors are clearly communicated to supervisors and students through written guidance.

14
Institutions will ensure that the quality of supervision is not put at risk as a result of an excessive volume and range of responsibilities assigned to individual supervisors.

Progress and review arrangements

15
Institutions will put in place and bring to the attention of students and relevant staff clearly defined mechanisms for monitoring and supporting student progress.

16
Institutions will put in place and bring to the attention of students and relevant staff clearly defined mechanisms for formal reviews of student progress, including explicit review stages.

17
Institutions will provide guidance to students, supervisors and others involved in progress monitoring and review processes about the importance of keeping appropriate records of the outcomes of meetings and related activities.

Development of research and other skills

18
Institutions will provide research students with appropriate opportunities for personal and professional development.

19
Each student's development needs will be identified and agreed jointly by the student and appropriate academic staff, initially during the student's induction period; they will be regularly reviewed during the research programme and amended as appropriate.

20
Institutions will provide opportunities for research students to maintain a record of personal progress, which includes reference to the development of research and other skills.

Feedback mechanisms

21
Institutions will put in place mechanisms to collect, review and, where appropriate, respond to feedback from all concerned with postgraduate research programmes. They will make arrangements for feedback to be considered openly and constructively and for the results to be communicated appropriately.

Assessment

22
Institutions will use criteria for assessing research degrees that enable them to define the academic standards of different research programmes and the achievements of their graduates. The criteria used to assess research degrees must be clear and readily available to students, staff and external examiners.

23
Research degree assessment procedures must be clear; they must be operated rigorously, fairly, and consistently; include input from an external examiner; and carried out to a reasonable timescale.

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Student representations

25
Institutions will put in place and publicise procedures for dealing with student representations that are fair, clear to all concerned, robust and applied consistently. Such procedures will allow all students access to relevant information and an opportunity to present their case.

Complaints

26
Independent and formal procedures will exist to resolve effectively complaints from research students about the quality of the institution's learning and support provision.

Appeals

27
Institutions will put in place formal procedures to deal with any appeals made by research students. The acceptable grounds for appeals will be clearly defined.

Appendix 2

Membership of the working group for the Code: Postgraduate research programmes

Patricia Ambrose, Executive Secretary, Standing Conference of Principals

Professor Susan Bassnett, Pro Vice-Chancellor, University of Warwick

Professor Michael Bradford, Pro Vice-Chancellor, University of Manchester

Dr Tim Brown, General Secretary, National Postgraduate Committee

Dr Iain Cameron, Head of Postgraduate Training, Engineering and Physical Sciences Research Council

Jen Crowe, Postgraduate Student Officer, University of Birmingham

Professor Howard Green, UK Council for Graduate Education

Paul Hubbard, Head of Research Policy, Higher Education Funding Council for England

Professor Sandra Kemp, Director of Research, Royal College of Art

Dr Tom Loeffler, Head of Postgraduate Training Policy, Biotechnology and Biological Sciences Research Council

Dr Charles Marriott, Policy Officer, Universities Scotland

Professor Alistair McCulloch, Head of Research, Edge Hill College of Higher Education

Paul Mitchell, Academic Registrar, University of Newcastle-upon-Tyne

Professor Mary Ritter, Director, Graduate School of Life Sciences and Medicine, Imperial College

Simeon Underwood, Senior Assistant Registrar, London School of Economics and Political Science

Professor Diana Woodward, Director of Research, Napier University, Edinburgh

David Young, Senior Policy Adviser, Universities UK

Gill Clarke, Assistant Director, Quality Assurance Agency for Higher Education and Director, Teaching Support Unit, University of Bristol

Janet Bohrer, Development Officer, Quality Assurance Agency for Higher Education

Dr Alastair Robertson, Development Officer, Quality Assurance Agency for Higher Education

Appendix 3

Skills training requirements for research students: joint statement by the research councils/AHRB

Introduction

The research councils and the Arts and Humanities Research Board (AHRB) play an important role in setting standards and identifying best practice in research training. This document sets out a joint statement of the skills that doctoral research students funded by the research councils/AHRB would be expected to develop during their research training.

These skills may be present on commencement, explicitly taught, or developed during the course of the research. It is expected that different mechanisms will be used to support learning as appropriate, including self-direction, supervisor support and mentoring, departmental support, workshops, conferences, elective training courses, formally assessed courses and informal opportunities.

The research councils and the AHRB would also want to re-emphasise their belief that training in research skills and techniques is the key element in the development of a research student, and that PhD students are expected to make a substantial, original contribution to knowledge in their area, normally leading to published work. The development of wider employment-related skills should not detract from that core objective.

The purpose of this statement is to give a common view of the skills and experience of a typical research student, thereby providing universities with a clear and consistent message aimed at helping them to ensure that all research training is of the highest standard, across all disciplines. It is not the intention of this document to provide assessment criteria for research training.

It is expected that each council/board will have additional requirements specific to their field of interest and will continue to have their own measures for the evaluation of research training within institutions.

(A) Research skills and techniques - to be able to demonstrate:

1. The ability to recognise and validate problems and to formulate and test hypotheses.
2. Original, independent and critical thinking, and the ability to develop theoretical concepts.
3. A knowledge of recent advances within one's field and in related areas.
4. An understanding of relevant research methodologies and techniques and their appropriate application within one's research field.
5. The ability to analyse critically and evaluate one's findings and those of others.
6. An ability to summarise, document, report and reflect on progress.

(B) Research environment - to be able to:

1. Show a broad understanding of the context, at the national and international level, in which research takes place.
2. Demonstrate awareness of issues relating to the rights of other researchers, of research subjects, and of others who may be affected by the research, eg confidentiality, ethical issues, attribution, copyright, malpractice, ownership of data and the requirements of the Data Protection Act.
3. Demonstrate appreciation of standards of good research practice in their institution and/or discipline.
4. Understand relevant health and safety issues and demonstrate responsible working practices.
5. Understand the processes for funding and evaluation of research.
6. Justify the principles and experimental techniques used in one's own research.
7. Understand the process of academic or commercial exploitation of research results.

(C) Research management - to be able to:

1. Apply effective project management through the setting of research goals, intermediate milestones and prioritisation of activities.
2. Design and execute systems for the acquisition and collation of information through the effective use of appropriate resources and equipment.
3. Identify and access appropriate bibliographical resources, archives, and other sources of relevant information. Use information technology appropriately for database management, recording and resending information.

(D) Personal effectiveness - to be able to:

1. Demonstrate a willingness and ability to learn and acquire knowledge.
2. Be creative, innovative and original in one's approach to research.
3. Demonstrate flexibility and open-mindedness.
4. Demonstrate self-awareness and the ability to identify own training needs.
5. Demonstrate self-discipline, motivation, and thoroughness.
6. Recognise boundaries and draw upon/use sources of support as appropriate.
7. Show initiative, work independently and be self-reliant.

(E) Communication skills - to be able to:

1. Write clearly and in a style appropriate to purpose, eg progress reports, published documents, thesis.
2. Construct coherent arguments and articulate ideas clearly to a range of audiences, formally and informally through a variety of techniques.
3. Constructively defend research outcomes at seminars and viva examination.
4. Contribute to promoting the public understanding of one's research field.
5. Effectively support the learning of others when involved in teaching, mentoring or demonstrating activities.

(F) Networking and teamworking - to be able to:

1. Develop and maintain co-operative networks and working relationships with supervisors, colleagues and peers, within the institution and the wider research community.
2. Understand one's behaviours and impact on others when working in and contributing to the success of formal and informal teams.
3. Listen, give and receive feedback and respond perceptively to others.

(G) Career management - to be able to:

1. Appreciate the need for and show commitment to continued professional development.
2. Take ownership for and manage one's career progression, set realistic and achievable career goals, and identify and develop ways to improve employability.
3. Demonstrate an insight into the transferable nature of research skills to other work environments and the range of career opportunities within and outside academia.
4. Present one's skills, personal attributes and experiences through effective CVs, applications and interviews.



The Quality Assurance Agency for Higher Education
Southgate House
Southgate Street
Gloucester GL1 1UB

Tel 01452 557000
Fax 01452 557070
Email comms@qaa.ac.uk
Web www.qaa.ac.uk

QAA058 09/04