

Discussion paper about doctoral programmes

Introduction

1 During 2006, the Quality Assurance Agency for Higher Education (QAA) asked experienced practitioners in the sector about:

- the definition of a research degree in the *Code of practice for the assurance of academic quality and standards in higher education (the Code of practice), Section one: Postgraduate research programmes*
- master's degrees as entry qualifications for doctoral programmes
- the increasing diversity of United Kingdom (UK) doctoral degrees, including programme structures, periods of study and outcomes
- the attributes of doctoral graduates in relation to the doctoral qualification descriptor in *The framework for higher education qualifications in England, Wales and Northern Ireland (FHEQ)*¹, how these attributes are assessed and the related expectations of their supervisors, examiners and employers
- comparability of UK doctoral programmes and graduates with those in continental Europe.

2 The following sections summarise the information and opinions collected so far. QAA now seeks a broader view from the sector and wishes to consult widely on these topics.

3 Some questions are posed at relevant points in the paper. These are intended to focus and stimulate thinking, but responses need not be structured around answers to the questions. Please feel free to comment in whatever way best suits you and what you want to say.

Definition of a research degree in the *Code of practice, Section one: Postgraduate research programmes*

4 The revised version of the *Code of Practice, Section one: postgraduate research programmes* (September 2004), covers the following research qualifications: '... 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'.

5 Since 2004, QAA has become aware that some professional doctorates may not fit this definition. At the time of publication, the definition was drafted so as to

¹ The FHEQ is available at: www.qaa.ac.uk/academicinfrastructure/FHEQ/EWNI/default.asp#annex1

exclude the majority of Master of Research (MRes) degrees; institutions have not so far informed QAA that this is inappropriate.

Q1: Is the *Code of practice* definition still appropriate? If not, how would you wish it to be amended?

Master's degrees as entry qualifications for doctorates

6 This section relates to work being undertaken by QAA in relation to the M level benchmarking project² and how it links to doctoral programmes.

7 The relevance of master's programmes in this document is mainly their use as entry qualifications for doctoral degrees. Points arising from the QAA M level benchmarking conference in February 2006, as well as from recent conversations with practitioners in the sector, include the following points.

i The requirement of some but not all research councils for either a '1+3' doctoral programme structure (which includes the equivalent of a one-year master's programme, including in some cases the MRes or professional training), or a stand-alone master's degree (taught or research) as an entry qualification for a doctorate.

ii In the UK, it is still common in some subjects for bachelor's graduates to be admitted to doctoral programmes (they may be nominally registered for a research master's degree in the first/second year). Any requirement to change this practice could affect institutions' ability to recruit to doctorates in these subjects.

iii At a European Universities Association (EUA) seminar held in Nice, 7-9 December 2006³ (in preparation for the May 2007 Bologna Ministerial meeting in London), the question of master's qualifications for entry to doctorates was discussed. The draft final conclusions from the seminar contain the following statement in relation to entry qualifications for doctoral programmes:

2.3 Ensuring access and admission

In a fast-changing environment, it is essential to maintain flexibility in admissions to doctoral programmes, and full institutional autonomy: diversity of institutional missions and context, and the growing importance of lifelong learning, mean that there are good reasons for different entry requirements in institutions and programmes provided fairness, transparency and objectivity is ensured;

The Bologna commitment that the second cycle gives access (= right to be considered for admission to the third cycle) should be maintained, but access to the third cycle should not be restricted to this route.

iv A concern that, with the political pressure for alignment with continental Europe, UK institutions' master's programmes will not be feasible in the future

² See notes of conference: *Securing and maintaining academic standards: benchmarking M level programmes*, 17 February 2006, at: www.qaa.ac.uk/academicinfrastructure/benchmark/masters/Mlevelbenchmarkingfeb06.pdf

³ Draft final conclusions – preparing final conclusions for the London communiqué, are at: www.eua.be/fileadmin/user_upload/files/Nice_doctorates_seminar/final_recommendations_in_EUAtemplate.pdf

because most M level degrees in the rest of Europe last for more than one calendar year and up to two years. Although more recent Bologna developments recognise that qualifications are awarded for exit achievements and ability, the significant difference in volume between one and two years of study could affect the ability of UK master's graduates to be admitted to doctoral programmes in other European countries.

Q2: What are your views about master's degrees becoming necessary entry qualifications for doctoral degrees?

Q3: Do you have any comments about other specific issues raised in i to iv above?

The increasing diversity of UK doctoral degrees, including programme structures, periods of study and outcomes

8 **Diversity** of doctoral degrees is particularly relevant to the UK. In continental Europe, the PhD is the predominant research qualification, whereas in the UK, there has already been some diversification, particularly in professional doctorates but also in research master's qualifications. However, at the EUA seminar in Nice, referred to above, it was clear that other European countries are developing professional doctorates and that these are likely to become more widely available in future. The following is a relevant extract from the draft final conclusions of the seminar:

3.1 Diversifying doctoral programmes

A number of diverse routes to the doctorate have been developed in Europe in recent years. These recent developments include doctorates tailored towards specific professions (so-called 'professional' doctorates), joint doctorates and the European doctorate, and a variety of university-industry collaboration based doctorates.

All awards described as Doctorates should (no matter what their type or form) be based on a core of processes and outcomes. Original research has to remain the main component of all doctorates. There should be no doctorate without original research.

Core processes and outcomes should include the completion of an individual thesis (based upon an original contribution to knowledge or original application of knowledge) that passes evaluation by an expert university committee with external representation.

Professional doctorates

So-called 'professional' doctorates are doctorates that focus on embedding research in a reflective manner into another professional practice. They must meet the same core standards as 'traditional' doctorates in order to ensure the same high level of quality. It may be appropriate to consider using different titles to distinguish between this type of professional doctorates and PhDs.

In order to ensure a broad discussion on this topic it will be important to ensure the dissemination of information on the rapidly growing number of professional doctorates – particularly in the UK but also in other countries - across the entire European higher education sector.

9 **Periods of study and doctoral outcomes:** it has become the 'norm' for institutions to expect full-time doctoral candidates to complete their programmes within three to five years (or the equivalent for part-time students). Full-time research council-funded doctoral students normally receive funding for three to four years (four years for those on the '1+3' programmes mentioned in paragraph 7i above). There is pressure on doctoral candidates, not only to complete on time, but to show they have acquired a range of skills (research-specific and generic) through their doctoral programme.

10 Linked with paragraphs 11-21 below, it has been suggested that, across the range of disciplines, it is now unrealistic for universities to expect dissertations 'of publishable quality' or 'leading edge' research from doctoral candidates within the periods outlined above. This situation is alluded to in a discussion paper by Chris Park on behalf of the Higher Education Academy (HEA), *Redefining the Doctorate*⁴, in the section headed Fitness for purpose, where he mentions 'widely articulated tensions between product (producing a thesis of adequate quality) and process (developing the researcher), and between timely completion and high quality research'.

Q4: For those in an academic institution, how is your institution responding to the diversity of doctoral degrees? For example, how are the regulations for the PhD and professional doctorates similar and different?

Q5: Are entry qualifications and candidates' profiles for different doctorates the same or diverse? If they are different, please provide further information about the differences in relation to each type of doctorate.

Q6: Do you have any general comments about periods of study or outcomes of doctoral programmes?

Attributes of doctoral graduates in relation to the doctoral qualification descriptor included in the FHEQ, how these are assessed, and the related expectations of their supervisors, examiners and employers

11 **Doctoral qualification descriptor:** we now turn to the formal definition of the attributes that might be expected of doctoral graduates in the UK, as set out in the Doctoral qualification descriptor in the FHEQ. These are attached as an Annex to this paper.

12 The existing descriptor, published in 2001, contains generic, research-related attributes that can be applied to doctoral graduates in any subject. The descriptor also mentions transferable skills necessary for employment. It does not differentiate between different types of doctoral qualification.

13 In *Redefining the Doctorate*, Chris Park, touches on the expectations and requirements of employers (p.19). He argues that, although doctoral graduates 'usually do bring added value to an enterprise – including specialist knowledge, research and analytical skills, future potential maturity...' some research suggests they 'lack commercial awareness, are generally over-specialised, face difficulties in adapting to non-academic work cultures, and often have unrealistic expectations (McCarthy and Souter 2006)'.

⁴ *Redefining the Doctorate*, Chris Park, Higher Education Academy, January 2007, ISBN 978-1-905788-29-3, pp 6-7.

14 **Originality:** as mentioned in section (i) of the doctoral qualification descriptor and also in the extract from the Nice final conclusions, a fundamental criterion for doctoral degrees is that they should include some form of 'original' research. For example, most institutions' regulations for doctoral degrees contain references to an expectation of original work, or contribution, and this is one of the criteria used to assess doctoral candidates.

15 However, there is no universally agreed definition of what 'originality' means when used as a criterion for making a doctoral award. Is it original thought? Carrying out new work? The application of existing knowledge to a new area? Some institutions have clear criteria for awarding doctoral degrees that include statements about making a significant contribution to learning, either through the discovery of new knowledge (which might also change existing views), developing a new theory, or applying existing knowledge in new situations.

Q7: In your view, do the attributes of doctoral graduates described in the FHEQ doctoral qualification descriptor still apply?

Q8: How would/do you/does your institution define 'originality' in the context of doctoral study?

Q9: Does the qualification descriptor remain appropriate for different types of doctoral graduate?

Q10: To what extent, if at all, should employers' views influence the doctoral qualification descriptor?

16 **The assessment of doctoral candidates in the UK:** this involves a 'closed' oral examination, involving a small number of people including the candidate, his/her examiners and, depending on the circumstances, possibly an independent chair of the examination and sometimes the candidate's supervisor (with the candidate's permission), or another observer. The assessment is of the candidate's doctoral thesis or dissertation and the way in which the candidate is able to explain and defend it. In subjects where the candidate's work also includes an artefact or other practical output, such as a musical composition, arrangements are made for the examination to include assessment of this.

17 In professional doctorates, taught modules are an integral part of the programme. Increasingly, PhD programmes include taught elements, such as research methods units, or other modules that enable the candidate to acquire skills that may be necessary to the successful completion of the doctoral degree and/or useful for the next stage in the candidate's career. It is becoming more usual for some subjects/institutions to accredit optional and/or compulsory taught elements successfully completed by PhD candidates during their research programme but this does not normally form part of the overall PhD assessment. In a small number of institutions taught elements need to be completed successfully before the thesis or dissertation can be submitted.

18 The PhD examination is not intended specifically to evaluate the skills acquired by the candidate, although it has been suggested that some skills, for example the ability to communicate orally and in writing, are an implicit part of the doctoral assessment.

19 Further detailed information about the UK doctoral examination process can be found in Tinkler and Jackson's *The Doctoral Examination Process*⁵.

20 **The assessment process for doctoral candidates in continental Europe:** this is different from the process described above and there are variations between continental countries. One of the most notable differences between the UK and the rest of Europe is that in the UK the oral examination is normally a relatively private experience involving only two or three examiners and the final outcome is not known in advance (although each examiner usually submits an independent report on the dissertation before the viva takes place); in some other countries the academic assessment of the candidate is quite separate from the oral defence of the thesis, which is sometimes a public event. For example, the written dissertation may need to have been approved as being of an adequate doctoral standard before permission is granted for a public 'defence' to take place. In some countries, the candidate may be invited to give one or more public lectures immediately before the (also public) defence of the thesis.

21 **Credit at doctoral level:** while some UK institutions accredit taught modules students take as part of their doctoral training (eg research methods or other skills based modules) and some attach credit to all levels of professional doctorates, there is no obvious rationale for accrediting the PhD. The framework for qualifications of the European Higher Education Area does not include any typical credit range for the third cycle and this is welcomed by the UK.

Q11: Are there different outcomes and assessment criteria for different doctorates? If yes, how do they differ?

Q12: Do you have any other comments about assessment criteria for doctoral qualifications and how they are applied in the examination process?

Q13: Does your institution accredit any part of doctoral qualifications, including PhD programmes? If yes, please provide further details, including the level and amount of credit awarded.

Other relevant (and explicit) questions are posed by in *Redefining the Doctorate*, under the heading 'Assessment', sections (a) to (e).

Q14: Do you think the UK can learn from continental/European assessment models for the doctorate?

Q15: Do you have experience of using independent chairs in oral examinations? If yes, please give further details.

Comparability of doctoral programmes and graduates with those in continental Europe

22 In addition to the point immediately above concerning the assessment of doctoral candidates in continental Europe, there are other differences in practice between the UK and wider Europe, some of which are mentioned below.

23 At a meeting in September 2006, hosted by the Universities UK's Europe Unit, participants contributed to revising a draft position paper for the UK HE sector on the Bologna process and doctoral level qualifications. A final version

⁵ *The Doctoral Examination Process: A handbook for students, examiners and supervisors*, Penny Tinkler and Carolyn Jackson, Society for Research into Higher Education and Open University Press / McGraw-Hill Education, ISBN 0-335-21305-7, 2004.

of the paper has since been published on the Europe Unit website⁶. The paper notes the following points:

- i **Entry to doctoral programmes:** As mentioned in paragraphs 6-7 above, in continental Europe the majority of countries require a student to have completed a master's degree before he/she is eligible to register for a doctorate.
- ii **Joint degrees:** the concept of a joint doctoral degree has at least three different interpretations:
 - a qualification that involves registration by a student with two or more institutions, either consecutively or concurrently but which is awarded by only one of the institutions
 - 'joint' degrees arising from subject level collaboration between two or more institutions where the award is made in the name of more than one institution. For example, the EUA has developed criteria for a 'European Doctorate', partly to enable degrees to be offered jointly by institutions in different European countries
 - some European universities collaborate to provide 'co-tutelle' arrangements whereby a doctoral candidate can combine study in two countries towards one or more awards, ie after initial registration in his/her home country, a candidate may study for and be awarded a PhD in another European country, then return home and receive a further research award based on the same work.

24 All the above examples require co- or joint supervision which in itself can present challenges for student support, quality assurance and skills development.

Q16: Do you have any comments about the joint degrees described above? Are you aware of other types of joint doctoral degrees? If so, how are they different from / do they compare with the examples outlined?

Q17: What particular issues do you think institutions need to be aware of when developing joint doctoral degrees?

iii **The status of doctoral candidates:** in continental Europe doctoral students are awarded the status of a member of academic staff; in the UK they have student status, providing exemption from income tax and national insurance contributions but also ineligibility for pension rights. The distinction becomes blurred when members of staff in institutions are at the same time registered for research degrees.

Q18: What are your views about the status of doctoral candidates?

25 Finally, the House of Commons Education and Skills Select Committee has published a report on the Bologna Process⁷, which contains references to doctoral qualifications. This may be of interest in the context of the above points.

26 Please send your response to this paper to Gill Clarke (g.clarke@gaa.ac.uk) by **13 July 2007**.

⁶ UK higher education sector position paper on the Bologna Process and doctoral level qualifications, 23 October 2006, at: [www.europeunit.ac.uk/resources/UK%20HE%20sector positionpaper doctoralissues%20.doc](http://www.europeunit.ac.uk/resources/UK%20HE%20sector%20positionpaper%20doctoralissues%20.doc)

⁷ House of Commons, Select Committee on Education and Skills – Fourth report, *The Bologna Process*, 17 April 2007: www.publications.parliament.uk/pa/cm200607/cmselect/cmmeduski/205/20502.htm

Annex A: Descriptor for qualifications at Doctoral level: Doctoral degree

Doctorates are awarded to students who have demonstrated:

- i 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
- ii 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
- iii the general ability to conceptualise, design and implement a project for the generation of new knowledge, applications or understanding at the forefront of the discipline, and to adjust the project design in the light of unforeseen problems
- iv a detailed understanding of applicable techniques for research and advanced academic enquiry.

Typically, holders of the qualification will be able to:

- a make informed judgements on complex issues in specialist fields, often in the absence of complete data, and be able to communicate their ideas and conclusions clearly and effectively to specialist and non-specialist audiences
- b continue to undertake pure and/or applied research and development at an advanced level, contributing substantially to the development of new techniques, ideas, or approaches

and will have:

- c the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative in complex and unpredictable situations, in professional or equivalent environments.