

**Louise Morley, Diana Leonard and Miriam David**

**Quality and equality in British PhD assessment**

Abstract:

This paper asks whether doctoral assessment has escaped the regulation of quality assurance procedures. Raising questions about the affective and micropolitical dimensions of an oral examination conducted in private, it explores how current concerns about quality assurance, standards, benchmarks and performance indicators in higher education apply to the assessment of doctoral/research degrees in Britain, and in particular to the viva voce examination. Successful PhD completion is a key performance indicator for universities and an important basis for the accreditation of their staff. Despite the rise of new managerialism, a general preoccupation with calculable standards and outcomes and an emphasis on student entitlements, transparency of decision making and information for ‘consumers’, there still seems to be considerable variation, and some mystification, in how doctoral assessment is conducted and experienced. The massification of doctoral studies and the doubling in number of institutions awarding their own doctorates, post-1992, are both likely to increase product variety still further.

In the last decade of the twentieth century, there was a major expansion of doctoral studies and a widening of the types of doctorate that may be undertaken in the UK. Although attention has been given to improving supervision and research skills training here since the late 1980s, the assessment process seems to have escaped the scrutiny, checks and balances currently being applied to other academic programmes.

In this paper we wish to explore if and how quality assurance, standards, benchmarks and performance indicators should apply in particular to the viva voce examination. We shall also consider the emotional, affective and micropolitical dimensions of an oral examination conducted in private.

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## Policy changes and research on the PhD

One of the less-remarked aspects of the recent increase in numbers of postgraduate students and the ‘deregulation’ accompanying the rise of new managerialism in UK higher education is the massification of the research student population. This has been accompanied by the increased autonomy and potential variation among the universities providing doctoral studies. There are now over 101,000 doctoral/research students in UK universities and more than 10,000 new students started their PhDs in 1998/1999 – compared to just over 3,000 in 1992 (Gillon 1999). Furthermore, with the advent of ‘professional doctorates’ and general credential inflation, those doing ‘research-based degrees’ now represent a quarter of all postgraduates and include many overseas students. The creation of a new system of universities in Britain from 1992 both abolished the Council for National Academic Awards and empowered ‘new universities’ to regulate their own PhDs. The ability and capacity to supervise doctoral students was one of the main criteria for university status. This has resulted in a doubling of the number of universities in Britain, with each having their own regulations and formal and informal procedures for awarding their own doctorates. It also ensured that even those higher education institutions which are not yet universities have perforce to be engaged in PhD supervision in order to become eligible to change their status. However, more recently, there have been proposals to reduce the number of providers and to restrict doctoral level teaching to university departments scoring 3 or more on the Research Assessment Exercise (RAE), and supervision to ‘active’ researchers.

The unremarked massification of the doctorate follows a much better remarked series of policy documents and then research studies on the PhD of the late 1980s and 1990s (see ABRC 1982, Winfield 1987, White Paper 1993, Youngman 1994, Burgess 1994, Dunkerley & Weeks 1994, Delamont 1989, Hockey 1997, Harris 1996, Burnham 1994, Leonard 2000). In this earlier period, the focus was on the poor submission rates and completion times of doctorates in first the social sciences and then other disciplines. Action was taken first to introduce financial sanctions on institutions with poor completion rates and to give attention to supervision quality. The next move was to put a new stress on the doctorate as research training rather than as scholarship – with required methodology courses or a preceding specialist master’s course in research. These interventions culminated in the Quality Assurance Agency’s (QAA) publication of a *Code of Practice for Postgraduate Research Programmes* in 1999, which lists a series of precepts identifying key matters in quality assurance (QAAHE 1999). The Quality Assurance Agency has since put into effect its promise to develop national qualifications frameworks for postgraduate qualifications. However, the complexities of the balance between conventional and professional or taught doctorates remain to be clarified. There is still discussion about assessing taught courses and providing extra training in a number of employment-related ‘transferable skills’ (UKCGE 2002).

The evidence base for the policy changes was initially, and remains, quite sparse. The evidence included rather inadequate statistical records, self-report studies, documentary analysis and narratives. Delamont et al. (1998) indicate how difficult it is to research doctoral supervision, let alone assessment practices. In their discussions

of the doctoral experience they note that their own data on vivas come only from supervisors and students recalling and describing their practices and philosophies, rather than from direct observation or written reports (see also Delamont et al. 2000, Eggleston & Delamont 1983). Becher et al. (1994) are relatively sanguine about the assessment process. The process of the presentation of a lengthy thesis, followed by ‘defending’ it in a private viva voce examination to the satisfaction of (usually) two examiners, at least one from another university, was seen as appropriate. They say ‘Assessment at the PhD level may not (any more than it is in other contexts) be a rigorously scientific process, but it is not a lottery either’ (Becher et al.: 137). They also observed that although ‘quality may be more easily recognised than defined, especially across disciplines’, most students do get a ‘fair but not over generous hearing’ (Becher et al.: 138). However, other commentators are very critical, particularly of the viva. Again on anecdotal evidence, Burnham (1994) describes it as ‘one of the best kept secrets in British higher education’ and claims it ‘both humiliates the examinee and diminishes the credibility of those who examine’ (Burnham 1994: 30), while Anderson (1992) suggests the potential for abuse in doctoral assessment is ‘awesome’ (Anderson 1992: 69).

Oral examination is a costly process – which is one reason why this mode has largely been abandoned at undergraduate level; the other reason being their notorious unreliability and potential for sex, race and other stereotyping and discrimination (see Brown & Atkins 1988, Brown & Knight 1994: 64).

There is a lack of systematic attention to the complexities of doctoral assessment, apart from some interesting research has looked at what constitutes ‘originality’ and ‘excellence’ in the PhD thesis (Phillips 1994, Phillips & Pugh 2000). This is in sharp contrast to the substantial research on assessment in schools (Gipps & Murphy 1994, Torrance & Pryor 1998). It is also curious, given the general view that ‘Assessment development [is] the most powerful instrument for change in higher education’ (Brown & Knight 1994: 144).

In the absence of any research, vivas probably continue at doctoral level because they allow follow-up questioning and probing in a way denied to other forms of assessment. They can make apparent a learner’s excessive reliance on others. It is difficult to cheat. Furthermore, it is perhaps not inappropriate that a qualification for entry to an academic career should include a requirement to be articulate under stress and to defend one’s ideas. On the other hand, vivas/orals may equally continue because of a naïve belief that a face-to-face discussion is sufficient to make an accurate assessment of an interviewee’s performance or, even worse, an accurate prediction of his or her potential. So we would argue that if we are using vivas to assess students, then we should also assess the vivas we are using (Brown et al. 1997: 165–6)

### **The doctoral assessment process**

The fact that the assessment procedures for the doctorate remain relatively unexamined despite the degree’s major gatekeeping function, is largely ‘Because of strict rules on confidentiality, [which mean] examiners’ reports [and vivas] are seldom

open to scrutiny or any form of quality control' (Johnston 1997: 334). However, doctoral assessment 'horror stories' are slowly amassing in the public domain because the process is so often experienced as mysterious, mystifying and unfair:

Thanks for your input on Friday about ... PhD assessment/vivas. It made me aware of the sad experience that I went through in the 1980s when I undertook a part-time PhD, while continuing full-time teaching in a secondary school ... I had little contact with my supervisor, except when I sent him draft chapters and he gave me (limited) feedback on them; the research that I undertook was basically quantitative, but I was given no advice on research methods or even statistical methods (I can now see glaring errors in what I was trying to do!!) over the five years that it took to complete the study. I got 'fed up' with it after about four years, but was encouraged to continue – with the implication that it was OK. I completed and had a viva without any preparation or information about what to expect. The only thing that I remember about the viva was the external examiner asked why I had included such a long appendix (I was told to by my supervisor!) as he seemed annoyed at having to read all of it (or carry it around – it was a weighty document)! I was awarded an MPhil without any feedback as to why (maybe the examiner didn't like Liverpool accents?) – my supervisor never made any further contact with me (ever) and I was too p\*\*\*\*d off to contact him and received my certification through the post. I didn't know of any appeal procedure until you mentioned it on Friday (private correspondence to authors, 8 October 2000).

Moreover there are now a few recent studies which indicate that there is considerable – and alarming – variation in how the examination process, and especially the viva, is conducted:

***Formal regulations.*** First, the balance between the assessment of the text and the viva or oral examination is unclear and/or ambiguous. It is ill-defined as to whether it is a one- or a two-stage assessment process, and what the relative weight of the thesis is to the viva. In some institutions it is possible to produce a satisfactory thesis but fail the PhD on the basis of an unsatisfactory oral examination; while in many, students can defend a somewhat unsatisfactory thesis if they do a good viva. Even on a technical level there appears to be considerable variety. In their analysis of a sample of UK universities' policies and guidelines for PhD assessment, Tinkler and Jackson (2000) found that while there is general agreement amongst institutions on the main criteria on which the PhD should be assessed, there are substantial variations in the range of requirements for the award. There is also considerable variation in the detail in which these criteria are expressed. Some universities provide two pages outlining the skills and qualities required, while others provide one sentence.

***The choice and role of examiners.*** There are different rules applied to the role and appointment of externals both between universities and between undergraduate and masters and doctoral examinations. Tinkler and Jackson (2000) found that most universities' regulations contain fairly detailed criteria for the selection of examiners. These relate to academic credentials, experience and independence. The 'new' universities often have more explicit guidelines reflecting their CNAAs history and its

explicit formative guidance. They note that several institutions had a requirement for the external examiner to have examined at least three doctorates. This does assure a certain amount of experience between the two examiners – though it in turn raises questions about entry into existing networks of examiners, and the micropolitics of inclusion and exclusion. That is, how examiners are chosen via networks, sponsorship and interest representation. The externality itself can be questioned, when examiners are largely selected by supervisors. There is some recent work by Anglia Polytechnic University following the Australians in examining the text of examiners' reports and the vocabulary used by PhD examiners to indicate the satisfactoriness or otherwise of doctoral work for practice-based PhDs (Winter *et al.*, 2000). However, we have no work at all on the choice of examiners or directly (visual or oral) on the conduct of the viva. However, it should be noted that the British PhD 'external' examiner is not in fact being a moderator (as at undergraduate or Masters level) but rather the central examiner. There is in fact no moderation of PhD results – no sample of theses is selected to be looked at by, for example, a peer 'external assessor' from a disciplinary association, to see if he or she would agree with the outcomes. Rather, the examination of doctoral degrees in Britain is left to informal networks and a belief in a notion of collegiality. But 'collegiality' 'is one of those words ... that often masks complex power relations and the manipulative practices to which these can give rise' (Nixon *et al.* 1998: 283). In our own experiences as supervisors, examiners and members of appeal committees, we have seen several examples of practices in choosing examiners which disturb us as professionals and which would not bear scrutiny by external quality assurance agencies. For example, two professors, married to each other but working in different institutions, regularly examine (and pass) each other's doctoral students. Influential male professors sometimes select more junior female staff to act as internal examiners for their students. In these cases, to refer or fail the student could have disastrous career implications for the internal examiner. Many of the viva stories that permeate the academy give accounts of students being negatively affected by power struggles between the supervisor and the external examiner. Another issue is when theses which are considered quality products by some are failed as a result of an examiner being chosen whose values clash with those of the candidate. Johnston (1997: 345) concluded that 'as with gatekeepers to any community, examiners are most likely to pass theses which fit with their own ideologies'. Feminist scholarships, for instance, can be ridiculed by unsympathetic examiners (see Leonard 2001). Interdisciplinary work can be inappropriately examined. International students can be treated as second class citizens. Some of these practices have given rise to the developments of codes of good conduct within professional associations, but they are seldom regulated by universities' own quality assurance procedures.

***Examiners' reports.*** The production and timing of examiners' reports also vary from one institution to another. Some institutions require examiners' independent reports to be submitted prior to the viva, with specific recommendations, usually followed by a joint, albeit brief, consensus report afterwards. Elsewhere, examiners are required to submit reports after the viva has taken place. Examiners sometimes complain that the

viva is increasingly used by supervisors as formative assessment, with ‘uncooked’ theses submitted within the Research Council’s time limits to find out the minimum a particular examiner requires for a pass. This has been more systematically noted in Australian studies. Their broadly comparable education and doctoral system seldom uses vivas, having instead two or three anonymous external examiners who report on the thesis to the university’s postgraduate board, which makes the final decision. Several studies have been made of these reports because the committees charged with reconciling them have wondered at times if the examiners had read the same thesis (see Nightingale 1984, Kamler & Threadgold 1997). Their relative openness has allowed investigation of the way in which examiners were chosen (Parry & Hayden 1994) and the interrogation of some of the assumptions underpinning examiners’ decisions (Ballard 1996). They have also revealed the significant variety in style, length and layout, and conclusions of examiners. For example, some provide comments for each chapter while others discuss the thesis as a whole. Reports can range from one to 16 pages. There is often evidence of inconsistent interpretation of the grading recommendations by different individuals (Johnston 1997: 338–9). Nelson (1991) looked at the intensity of labour involved in the examination process and raised concerns about the preparation of examiners. By contrast, we simply do not know how often there is disagreement between examiners in the UK, and what happens as a consequence. Do these problems just get ‘lost’ within the system?

***Variations in the viva.*** There is also variation in how far students are prepared for the viva and how much they know about what is to happen or what to provide. In a survey of students in education who were close to completing their theses, a quarter, or 21 out of 84, were very uncertain about what criteria might be used by examiners (see Eggleston & Delamont 1983). They also thought the issue of whether a thesis is worth a PhD or not is a question of the time spent and the number of words written. They believed that there are no objective criteria and that the outcome depends entirely on the external examiner (but they had no idea how examiners were chosen). However, other students had very actively asked staff about the form and content of their examinations, the specialisms of their examiners, and/or had attended sessions or mock vivas run by their departments (Delamont et al. 1997). Hartley and Jory (2000) discovered that while 85 per cent of their 100 psychology postgraduate respondents successfully passed the examination, 40 percent found the viva to be a negative experience. Even where candidates passed, it was not experienced as a satisfactory process. Tinkler and Jackson (2000) also found that one in six of their 90 respondents felt that the viva serves a negative function and that it is not simply an examination of a particular piece of work, but a general induction process. Their participants argue there is no consensus about the purpose of the viva. It is sometimes ceremonial, sometimes celebratory and sometimes confirmatory. It has also been described as inquisitorial. The aggression, sarcasm and hostility that many respondents experienced were construed as a ‘virility test’ or rite of passage to becoming a licensed and authorised member of the academy. A positive viva can (possibly) result in sponsorship from a powerful member of the academy. Burnham reminds doctoral students that: ‘In addition to acting as an examiner your external will also, if you are

successful, act as your publicist' (1994: 31). The examination is therefore an opportunity to strike up a good working relationship on which candidates can later draw on for references and, in particular, for recommendations when approaching academic publishers. Tinkler and Jackson (2000) also note that 27 per cent of candidates from the arts/humanities/social sciences (AHSS) had vivas lasting up to one hour compared to 3 per cent for the natural sciences. Of AHSS candidates 15 per cent had vivas lasting two to three hours compared to 43 per cent in the natural sciences. This variation could be constructed as negative in so far as longer examinations prolong the pressure. However, a longer examination could also be seen as providing more opportunities for redemption. Or it may be that, in the sciences, it is the research, rather than its writing up in the thesis, that is being assessed and requires, on average, a lengthier oral examination.

While some university practices are changing with the introduction of chairs for vivas, traditionally, there have been no records kept of vivas – no audio recordings or notes or minutes made by a neutral person (a Chair or a university secretary or administrator) in case of dispute. Moreover, the Higher Education Statistics Agency (HESA) does not record statistics of outcomes (and certainly not by university, discipline, gender and race). Furthermore, there is effectively no right of appeal about the judgement, only against faulty procedures.

### **Comparative systems**

In other words, the UK doctoral examination, and the viva especially, seem to have remained completely outside the 'customer care' revolution that has entered the academy. Whether the 'customer' is the student, the potential employer or a funding agency, the maintenance of standards does not appear to be a central issue (Morley 2000, 2003). This may well become an issue in relation to the international reputation of the British PhD and become more urgent with the expansion of alternative, professional doctorates and the internationalisation and mobility of academic staff. How comparable are doctorates in different countries, and in particular how 'harmonised' are those within the European Union?

The secrecy of the British viva is in marked contrast to non-British education systems:

- In the North American system 'the examination' usually refers to the 'comprehensive examination' taken on the background literature review, planning and research proposal completed before work on the dissertation is actually begun. But the thesis itself is examined by the members of the dissertation committee who have worked with the student for some years, together with professors from other departments in the same university. That is to say, there may be four to eight people at the oral, with no one voice, certainly no 'external', previously unknown to the candidate, all-powerful voice suddenly appearing.
- In various continental European countries, on the other hand, the viva can be a major, staged public performance, usually held after two examiners have looked at the work and agreed the thesis is of a suitable quality to go forward.

The viva can be performed in public, where the audience can hear the examiners' questions and the candidate's defence, and whose members can also ask questions if they so wish.

What may be a case of shying away from considering doctoral assessment may be the result of the Advisory Board for the Research Councils' (ABRC 1993: 3) observation that 'the purpose (or purposes) of the PhD have not been set down in such a way as would attract unequivocal and widespread agreement'. Or it may be that the imperative for originality in doctoral studies and the need for specialist examiners means that judgements of worth are difficult to standardise within a framework of measurement and outcomes-based approaches (as stressed by Delamont et al. 1998). But equally there are subterranean agendas of values and ideologies in doctoral assessment which mean a thesis might conform to the technicalities of a quality product, but can still fail the assessment as a result of a clash of belief systems. An emphasis on technicist preparations is not just an over-simplification but a misunderstanding of the process of acquiring habitus and artistry, as well as sponsorship and networks, in this as in any other professional training (Bourdieu & Passeron 1990). The inexplicit ways in which examiners are selected, and the 'confidentiality' of the viva, mean that UK doctoral assessment can be unacceptably uncertain.

### **Visibility, transparency and quality assurance**

The Reynolds Report on academic standards for the Committee of Vice Chancellors and Principals (CVCP) in 1985, the Harris (1996) and Dearing Reports (1997), all put UK higher education assessment under scrutiny. This included a focus on quality assurance and standards, including concern with greater clarity as to the level of all degrees; comparability of standards between disciplines and across institutions; and the provision of better information for 'consumers', especially future employers, about what individual degrees cover.

There is also a developing notion of student entitlement and consumer rights. In line with this, there has been encouragement to have explicit criteria and/or processes and transparent appeals procedures (see QAA 1999). Texts on university accountability are starting to appear (e.g. Evans 1999). A few appeals around doctoral examinations have become visible and contentious, with associated press coverage (see for instance Anon 1993). In the new market culture of consumer rights, with students constructed as paying customers, rather than recipients of a welfare service, the problems of doctoral assessment are likely to increase as investors in the educational product want more certainty and reliability of outcome.

Currently, standards in the PhD are ensured through the assumption that what can be achieved in around three years' full-time study by a 'reasonably diligent student' is comparable in Physics and in Sociology or History (ABRC 1993). A further assumption is that peer examiners know what the thresholds are for the awards they are examining (Silver 1993) and that (at undergraduate and masters level) there is a system of external moderation.

The QAA Code of Practice for Postgraduate Research programmes (1999) does not deal with the problematic issues of who is selected to be the examiners and the conduct of the viva itself. It merely states that ‘research assessment processes should be clear and operated rigorously, fairly, reliably and consistently’ (QAAHE 1999: 12). Instead, it throws back onto either institutions themselves a requirement to ‘consider’ mechanisms and procedures to achieve this, or to professional associations to develop guidelines. But such an informed consideration of ‘mechanisms and procedures’ will be difficult, if not impossible, to achieve in the current absence of systematic, research-based information on the formal and the informal viva procedures actually in place across the sector, and in the absence of comparative statistics, moderation and appeals.

### **Conclusion**

New managerialism in the UK has transformed the priorities, culture and practices of the academy, including many aspects of postgraduate education and doctoral studies. Curiously, it has not had a very significant influence on the regulation and quality assurance of assessment of doctoral degrees and especially not on the oral component. There are no nationally agreed standards for PhD examining (Tinkler & Jackson, 2000). There is an urgent need to review current practices of assessment, in the light of the expansion of conventional PhDs, their emulation through professional and practice-based doctorates, and the moves to transform all forms of doctoral studies, while retaining traditional forms of assessment through the viva voce. The requirements of this review are to provide evidence on the diversity and differences within and between universities and subjects or disciplines through which inequalities may be maintained. In keeping with developments in new forms of management and forms of reflective practice, this would constitute a new research agenda. This could then contribute to equity procedures within universities. It could also aid the creation of an evidence-based national policy on forms of assessment of doctoral studies.

### **Recommendations**

We would like to recommend the following seven procedural changes at the level of national standards, guidelines and procedures. There should be:

1. Guidelines given to students about doctoral assessment.
2. Clarification about the balance between the thesis and the viva voce examination: and about the arrangements for when disagreements occur between examiners.
3. Transparency and accountability in relation to how internal and external examiners are selected, e.g. students should be asked to sign a consent form. This process should be subject to the same equal opportunities codes of practice used to regulate other university appointments.
4. A record made of the business transacted in viva voce examinations.
5. Justification of referral and failure to in relation to national criteria.

6. Easily accessed guidelines for appeal (all currently carried out in-house).
7. National statistics kept on complaints, appeals, referrals and failures, and for these to be disaggregated for gender, ethnicity, and race.

## Works cited

- Advisory Board for the Research Councils (ABRC) 1982 *Report of the working party on postgraduate education* London: HMSO
- Advisory Board for the Research Councils (ABRC) 1993 *The nature of the PhD – a discussion document* London: HMSO
- Anderson, M 1992 *Imposters in the temple* New York: Simon & Schuster
- Anon 1993 'Postgraduate forum news' *British sociological association newsletter network* 56, 7
- Ballard, B 1996 'Contexts of judgement: an analysis of some assumptions identified in examiners' reports on 62 successful PhD theses' paper presented at the 1996 *Conference on Quality in Postgraduate Research – Is it Happening?* Adelaide, 18-19 April
- Becher, T, M Henkel & M Kogan 1994 *Graduate education in Britain* London: Jessica Kingsley
- Bourdieu, P & JC Passeron 1990 *Reproduction in education* London: Sage
- Brown, G & M Atkins 1988 *Effective teaching in higher education* London & New York: Methuen
- Brown, G, J Bull & M Pendlebury 1997 *Assessing student learning in higher education* London: Routledge
- Brown, S & P Knight 1994 *Assessing learners in higher education* London: Kogan Page
- Burgess, RG (ed) 1994 *Postgraduate education and training in social sciences: processes and products* London: Jessica Kingsley
- Burnham, P 1994 'Surviving the viva: unravelling the mysteries of the PhD oral' *Journal of graduate education* 1: 30–4
- CVCP 1985 *Report on academic standards (the Reynolds Report)* London: Committee of Vice Chancellors and Principals
- Dearing, R 1997 *Higher education in the learning society (the Dearing Report)* London: National Committee of Inquiry into Higher Education
- Delamont, S 1989 'Gender and British postgraduate funding policy: a critique of the Winfield report' *Gender and education* 1: 1, 51–7
- Delamont, S, P Atkinson & O Parry 1997 *Supervising the PhD: a guide to success* Buckingham: Society for Research into Higher Education: Open UP
- Delamont, S, P Atkinson & O Parry 2000 *The doctoral experience: success and failure in graduate school* London: Falmer
- Delamont, S, O Parry & P Atkinson 1998 'Creating a delicate balance: the doctoral supervisor's dilemmas' *Teaching in higher education* 3: 157–72
- Dunkerley, D & J Weeks 1994 'Social science research degrees: completion times and rates', in RG Burgess (ed) *Postgraduate education and training in the social sciences: processes and products* London: Jessica Kingsley
- Eggleston J & S Delamont (eds) 1983 *Supervision of students for research degrees, with a special reference to educational studies* Crewe: British Educational Research Association
- Evans, GR 1999 *Calling academia to account: rights and responsibilities* Buckingham: SRHE and the Open UP

- Gillon, E 1999 'Report on the doctorate for the AUT, NATFHE, NUS and NPC, in A Goddard (ed) *The Times higher education supplement* 4 June
- Gipps, C & P Murphy 1994 *A fair test* Buckingham: Open UP
- Harris Report 1996 *Review of postgraduate education* Bristol: HEFCE, CVCP and SCOP
- Hartley, J & S Jory 2000 'Lifting the veil on the viva: the voice of experience' mimeo, paper to BERA seminar, June
- Hockey, J 1997 'A complex craft: United Kingdom PhD supervision in the social sciences' *Research in post-compulsory education* 2: 45–66
- Johnston, S 1997 'Examining the examiners: an analysis of examiners' reports on doctoral theses' *Studies in higher education* 22: 333–47
- Kamler, B & T Threadgold 1997 'Which thesis did you read?' *Policy and practice of tertiary literacy. selected proceedings of the first national conference on tertiary literacy: research and practice* Melbourne: Victoria University of Technology
- Leonard, D 2000 'Transforming doctoral studies: competencies and artistry' *Higher education in Europe. Special issue on women and change* XXV: 2, 181–92
- Leonard, D 2001 *A women's guide to doctoral studies* Buckingham: Open UP
- Morley, L 2000 'Quality and equality: intersections and collisions', in A Hodgson (ed) *Policies, politics and the future of lifelong learning* London: Kogan Page, 85–96
- Morley, L 2003 *Quality and power in higher education* Buckingham: Open UP
- Nelson, H 1991 'The gatekeepers: examining the examiners' *Australian historical association bulletin* 68: 12–27
- Nightingale, P 1984 *Examination of research theses higher education research and development* 3: 2, 137–50
- Nixon, J, M Beattie, M Challis & M Walker 1998 'What does it mean to be an academic?: a colloquium' *Teaching in higher education* 3: 3, 277–98
- Parry, S & M Hayden 1994 *Supervising higher degree research students* Canberra: Australian Government Publishing Services
- Phillips, EM 1994 'Quality in the PhD: points at which quality may be assessed', in R Burgess (ed) *Postgraduate education and training in the social sciences* London: Jessica Kingsley
- Phillips, EM & D Pugh 2000 *How to get a PhD: a handbook for students and their supervisors* Buckingham: Open UP
- QAAHE 1999 *Code of practice for the assurance of academic quality and standards in higher education: postgraduate research programmes* Gloucester: Quality Assurance Agency for Higher Education
- Silver, H 1993 *External examiners: changing roles? a study of examination boards, external examiners, and views of the future* London: Council for National Academic Awards
- Tinkler, P & C Jackson 2000 'Examining the doctorate: institutional policy and the PhD examination' *Studies in higher education* 25: 2, 167–80
- Torrance, H & J Pryor 1998 *Investigating formative assessment: teaching, learning and assessment* Buckingham: Open UP
- UKCGE (UK Council for Graduate Education) 2002 *Professional doctorates* Dudley: UKCGE
- White Paper 1993 *Realising our potential: a strategy for science, engineering and teaching* London: HMSO CD 2250
- Winfield, G 1987 *The social science PhD: the ESRC inquiry on submission rates* London: ESRC
- Winter, R, M Griffiths & K Green 2000 'The 'academic' qualities of practice: what are the criteria for a practice-based PhD?' *Studies in higher education* 25: 1, 25–37

Youngman, M 1994 'Supervisors' and students' experiences of supervision', in R Burgess (ed) *Postgraduate education and training in the social sciences: processes and products* London: Jessica Kingsley

### Further reading

Burgess, R (ed) 1997 *Beyond the first degree: graduate education, lifelong learning, and careers* Buckingham: Society for Research into Higher Education, Open UP

Deem, R & K Brehony 2000 'Doctoral students: access to research cultures – are some more unequal than others?' *Studies in higher education* 25: 2, 149–65

Fitzpatrick, J, J Secrist & DJ Wright 1998 *Secrets for a successful dissertation* London: Sage

Glatthorn, A 1998 *Writing the winning dissertation: a step-by-step guide* Thousand Oaks, CA: Corwin

Graves, N & V Varma (eds) 1997 *Working for a doctorate* London: Routledge

HESA 2000 *Students in higher education institutions 1998/99* Cheltenham: Higher Education Statistics Agency

Johnson, L, A Lee & B Green 2000 'The PhD and the autonomous self: gender, rationality and postgraduate pedagogy' *Studies in higher education* 25: 2, 135–47

Noble, K 1994 *Changing doctoral degrees: an international perspective*, Buckingham: Open UP

Rudd, E 1985 *A new look at postgraduate failure*, Guildford: SRHE and NFER-Nelson

Shaw, M & H Green 1996 'Standards in research awards: length, weight or quality? Developing an approach for resolving the dilemma' *Innovation and learning in education: the international journal for the reflective practitioner* 2: 3, 4-10

White Paper 2000 *Excellence and opportunity* London: HMSO

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