

Routes to qualified status: practices and trends among UK professional bodies

Stan Lester

Stan Lester Developments, Taunton, UK

Published in *Studies in Higher Education* 34 (2), 223-236 (2009)

Abstract

In the United Kingdom fully qualified status in professional occupations is normally awarded by a professional association or registration body. Both the requirements and the routes for qualifying vary between professions, although the majority include an academic component combined with or followed by a period of assessed practice. In recent years there have been pressures on professions to broaden their entry-routes while at the same time becoming more rigorous in the way that they sign off practitioners as fit to practise. A small-scale study undertaken in 2007 investigated how different professions operate entry-routes and qualifying processes. The findings indicate a trend towards increased flexibility, more thorough assessment of the practising phase, and some movement away from defined routes towards frameworks with robust exit-criteria. The pace of change is nevertheless uneven and there is scope for professions to learn from one another and from recent developments in higher education.

Introduction

A major function of many professional bodies in the United Kingdom and elsewhere is awarding fully-qualified status for the occupations that they represent. Depending on the context this can serve as a licence to practise, be customarily regarded as necessary to work in the profession, open the door to a wider range of work opportunities, or simply be regarded as a marker of progression. Qualified status can be linked closely to the achievement of a degree or postgraduate qualification, or it may be subject to additional requirements at some point post-graduation. Alternatively for some professional bodies it can be largely independent of higher education, either generally or for practitioners who have already gained significant experience or who have entered through a technician or paraprofessional route.

Both the way that professions qualify their members and the routes available to becoming qualified are evolving in response to a variety of pressures and influences, not all of which are complementary. The responses of professional bodies might therefore be expected to vary depending on the factors that are most critical or pressing for their particular occupations. At a general level the rapid increase in the number of graduates over recent years might suggest movement towards graduate entry, an increasing homogenisation of entry-routes, and potentially higher-level entry requirements. On the other hand changes in the patterns of work and careers together with an increased emphasis on access and lifelong learning might point in a broadly opposite direction, towards an opening-up of professions to entrants from a wider range of backgrounds and at different stages of their careers, with requirements that are more exacting in a practical sense rather than necessarily in terms of academic level.

In association with the Professional Associations Research Network (PARN) the author undertook a small-scale qualitative study during the latter half of 2007 to test these assertions and identify whether there are any significant trends in the qualifying processes of UK professions and the routes available for meeting them. The study was based on a sample of 23 UK professions from the 147 PARN member bodies (see table 1, end of paper), chosen to represent a range of sizes and ages of profession, chartered, government-regulated and voluntary bodies, and different occupational sectors. Desk research was carried out on each profession, in all but two cases a discussion was held with one or more relevant representatives of the qualifying bodies for each, then findings were checked back for accuracy followed if needed by an additional discussion or email exchange.

The study was principally concerned with practices in the UK. Similar principles apply in some other, principally Anglophone, countries where there is a tradition of independent professional institutions that govern qualifying requirements for their occupations. Some of the organisations in the study operate internationally, or have mutual recognition arrangements with their overseas counterparts. While many of the principles discussed apply more widely than this, the qualifying processes that are present may differ considerably; for example in much of continental Europe the norm is for equivalent notions of professional status to be attained through completion of a required degree or mandatory training programme followed by state registration (Collins 1990).

Professions in the twenty-first century

Professions can be broadly defined as occupations that involve the possession and use of expert or specialist knowledge, the exercise of autonomous thought and judgement, and acceptance of responsibility to clients and wider society through voluntary commitment to a set of principles (Hoyle & John 1995). An often-used criterion for being a profession has been the presence of an association or governing body that sets entry-requirements and exercises disciplinary powers (Belfall 1999), but not all recognisable professions meet this criterion and there are many examples of professional occupations (of which higher education is one) where professionalisation in this sense is relatively weak or even absent. Nevertheless it can be argued that the idea of *being professionally qualified*, as opposed to *having a qualification* that relates to a profession or occupation, is in the UK virtually synonymous with being accredited by a professional or regulatory body, and pragmatically this definition was used for the study along with a prerequisite that the level of qualification would be at least at the level of a higher education diploma (level 5 in the European qualifications framework, the EQF).

Requirements for becoming professionally qualified have evolved over time, responding to trends in professionalisation (Larson 1977) and more recently to the changing nature of post-compulsory education (Millerson 1964, Schon 1983). Various socioeconomic, technological and educational factors act on professions (Watkins *et al* 1992) and some of these have a fairly direct influence on entry-routes and requirements; some of the most important are outlined below.

One of the most obvious set of influences in recent times come from changes in the nature and organisation of work and in the balance of skilled to less skilled work. One aspect of this is a net movement towards higher-skill and more knowledge-intensive work, increasing the proportion of jobs that can be described as professional or managerial and more generally requiring higher skill levels

across a greater proportion of the workforce (Leitch 2006). Another is the well-documented decline of the single-organisation career along with newer and more ephemeral ways of organising, which in turn necessitate a movement towards self-directed careers and a need for greater self-management in the workplace (Handy 1989, Bayliss 1998). The implications for professional entry-routes are potentially complex, as on the one hand newly-qualified practitioners need to be more capable of managing their working contexts and their ongoing development, suggesting development processes that are more enquiry-based, reflective and experiential; while on the other it may be necessary for initial work-based development to become more diverse and 'smarter,' particularly in occupations where early-career employment can be unstable.

A second area that is of particular importance currently is the changing set of balances between competition, regulation and accountability. One of the ideals inherent in the notion of a self-governing profession is that the occupation benefits through having a measure of control over a niche labour-market, while society gains through the control of standards and availability of redress in an area where it may be difficult for laypeople to exercise judgement (Larson 1977, Marquand 1997). Recent trends in the UK have been both towards an increasing assumption of competition, with at the same time greater emphasis on regulation and accountability which has been accompanied by the willingness of policymakers, managers and laypeople to become more involved in professional decision-making (Broadbent *et al* 1997). The main implications for qualifying have been to highlight the need to be qualified in the first place; to ensure that qualified status reflects the ability to practise; and to move away from a system of entry-gates that can be manipulated to limit supply in favour of more transparent and criterion-based forms of entry. The professional curriculum is also being influenced by the associated move from 'delivery systems' where experts provide solutions to clients' problems (Schiff 1970) to 'realisation systems' (*ibid*) or 'co-production' (Reeves & Knell 2006) where practitioners and clients work together to design desired outcomes, or at least to 'modified delivery systems' (Lester 2002) where there is a balance of power between different stakeholder interests.

Thirdly, changing conceptions of professional knowledge have had and are continuing to have an impact on entry-routes. The majority view of professional knowledge in the middle part of the twentieth century has variously been described as technocratic, technical-rational, or based on positivism (Schön 1983, Bines 1992); in this model knowledge is seen as broadly stable and general, developed through research and codified in literature, and applied to practice. While it has never been as completely dominant as bipolar representations can imply, the technocratic model has had a strong influence on both the structure and content of initial professional development and on how professions seek to define themselves. From the 1980s onwards a more interpretive, reflective and creative conception of knowledge has started to come to the fore, as reflected in ideas such as reflective practice (Schön 1983), action learning (Revans 1980), critical action research (Carr & Kemmis 1986) and 'new paradigm' enquiry (Reason & Rowan 1981). This hasn't displaced the technocratic paradigm so much as becoming overlaid on it, although it is now perhaps the dominant model in professions such as teaching and social work that never fitted particularly well with a technical-rational view of knowledge. Professional entry-routes are becoming profoundly affected by this shift to incorporate greater use of work-based learning, and in some areas also with movement from an emphasis on mastering a propositional knowledge-base to greater concern with developing a deep understanding of the profession's core principles along with the skills to develop an evolving individual repertoire of abilities.

Finally, changes in higher and further education have had particular implications for professions and professional entry-routes. The large growth in the number of young people entering higher education in the two decades leading up to the turn of the millenium has produced a much larger pool of graduates available to professions, suggesting that entry-routes will become increasingly dominated by, and oriented towards, graduates. At the same time there has been a significant increase in the flexibility of higher education through developments such as accrediting prior experiential learning (APEL), e-learning, and individually- and organisationally-driven work-based learning for both individuals and cohorts (Boud & Solomon 2001, Costley 2007), enabling higher education based professional development routes to take on a wider range of forms. Parallel with this the rise of the 'skills agenda' in further education and vocational training from the early 1980s onward (Manpower Services Commission 1981) has led to developments such as the (re)introduction of apprenticeships in many sectors and the emergence of National Vocational Qualifications (NVQs) that are based on practical demonstration of the ability to carry out work functions. The direct impact of NVQs on professional entry-routes has been limited, but though there are doubts about the ability of the qualifications themselves to reflect professional work adequately, the underlying principles have had some influence on the assessment of practice (Winter & Maisch 1996, Lester 2001).

Types of requirement for becoming qualified

The majority of professional bodies set two types of requirement for entry: an academic or course-based requirement, and a requirement for a minimum level of practice. Of the 23 professions in the study 21 formally specify an academic requirement of some kind, and all except one either require entrants to meet minimum standards of practice, gain a specified period of experience, or both.

The academic requirement most commonly takes the form of a mandatory or recommended first degree and / or postgraduate qualification, and less commonly a qualification or examination set and validated by the professional body. Of the 21 professions in the study having an academic requirement fifteen use higher education qualifications exclusively, three have compulsory professional examinations, and in the remaining three both are available. A minority also allow external diplomas and to some extent NVQs to substitute, although beyond the use of Higher National Diplomas and Certificates *en-route* to degrees (the Higher National is a UK higher education qualification pitched below the level of a first degree) the only numerically significant example encountered was in occupational safety and health; in this field both the relevant NVQ and an independent awarding body's diploma are widely used as a step towards chartered status.

A common pattern in some professions is to specify two academic requirements, one relating either to general academic ability or to a foundation level, while the other is more explicitly concerned with initial professional development. This is often expressed as a requirement for a first degree or equivalent, sometimes with a conversion course for holders of less relevant degrees or a foundation course as an alternative for non-graduates, plus either an approved postgraduate qualification or the profession's own programme. Law, psychology, personnel and development, architecture and market research provide examples where the first stage is normally a degree, whereas in accountancy it may be a degree or a foundation course; in some cases a technician or paraprofessional qualification can also form an alternative or part-alternative to the first stage, as in the use of legal executive qualifications in law or an accounting technician diploma in accountancy.

In a minority of professions there is a close and formal relationship between the academic qualification and the requirement for becoming professionally qualified. This is particularly reflected in health professions (dentistry, nursing and podiatry among those studied), where the degree (or diploma in the case of some nursing courses) incorporates both the theoretical foundation and a significant amount of supervised practice. There are no alternatives to the academic entry-route, and successful completion of the degree meets most of the requirements for professional registration. A parallel exists in teaching for entrants who take a teaching degree. For all of these professions there are (at least for working in the public sector) further probationary requirements that may include additional training or supervised experience, but these are governed by the employer rather than the professional regulator.

A more widespread practice is for university courses to be approved or accredited by the professional body as meeting part of its requirements. Of the professions in the study, ten take this approach for their mainstream routes while a further three recognise qualifications on an individual basis. The essential difference from the health / teaching model is that the academic qualification does not normally incorporate the profession's practising requirement, and in some cases it needs to be supplemented by a professional course or examination.

In the past practising requirements for reaching initially-qualified level have often been expressed either purely as a set period of experience, or as a period of supervised practice with formal sign-off from the employer. Increasingly attention is now given to what the period of initial experience needs to cover, or to the standards that need to be reached on completion, or both. Most professions still specify a minimum length of time, anything between one and five years (with the mean for the relevant professions in the study at 2.6 years). As confidence in standard-setting and assessment practices increases, the length of experience is becoming seen as less important; for example civil engineering and landscape architecture have recently dropped their time requirements, while project management and conservation have never had minimum periods of practice.

Finally, the two last-mentioned professions take an atypical approach to granting qualified status in that they operate fairly comprehensive practice-based assessment processes that are not linked to any particular entry-route, course or training period. Project management is not a typical profession in that it is rarely chosen as an initial career-path, and its association's qualifying processes and training courses have evolved to support practitioners who usually already have managerial or technical experience. Conservation is more conventional in that most would-be practitioners now enter with a relevant degree or postgraduate qualification. However when it introduced a qualifying process in 1999 the professional body opted for a free-standing approach, setting up a rigorous work-based assessment that doesn't have any formal prerequisites but expects a high level of immersion in practice. In both cases the assessment looks for depth and breadth of understanding alongside a fairly mature level of practical capability.

Routes to becoming qualified

In practice many professions provide a variety of routes to becoming qualified which can reflect different ways of meeting their academic and practising requirements. Among those in the study the health occupations (with the exception of nursing) are based almost exclusively on full-time higher education and generally show the least flexibility, while the greatest variety of routes occur among

professions that are diverse and tend to attract mature entrants. Of the sixteen with reasonably well-defined routes to qualified status, three currently have a single route, six have two or three routes, five have four or five, and two have six or seven. Five have frameworks within which a variety of individual routes can be followed for instance through using full- and part-time courses, distance or work-based learning, various exemptions or accreditation for prior learning, and substitution of one type of component for another. In principle the 'routeless' qualifying processes in project management and conservation allow for any variety of pathways to be followed by individual practitioners.

One way of considering initial professional development routes, drawing on Houle (1980) and Bines (1992), is to classify them as sequential, parallel, integrated and experiential. Sequential routes involve a (normally) full-time course followed by a period of supervised practice, while parallel routes comprise a part-time course running alongside practice. Both have been common in the twentieth century, with parallel (often 'day-release') further education routes having given way to sequential degree-based ones, with more recently a resurgence in parallel but now university-level routes facilitated through the rise of part-time, distance and work-based degrees. Integrated routes go a step beyond the parallel model and aim to integrate theory and practice in a post-technocratic approach to development, while experiential routes emphasise learning through practice supplemented as appropriate by means such as independent study and short courses. Most of the professions in the study have parallel or sequential routes; fourteen have both. Two (nursing and podiatry) have integrated routes alone, and a further three have integrated routes available. Fully experiential routes are available in eleven professions, generally associated with mature entry.

Many professions - just over half those in the study - provide or accept alternatives to course-based routes for experienced practitioners and sometimes for other mature entrants. In most cases these are minority pathways; they form majority routes in project management and market research and are significant (over 10%) in conservation, landscape architecture, chemistry and (if the NVQ route is included) occupational safety and health. Otherwise they account for small proportions of practitioners, sometimes single figures annually. In some occupations (eight in the sample) it is possible for experienced entrants to meet all the qualifying requirements for the profession through a practice-based or practice-related assessment alone, normally involving one or more of a portfolio, project report or series of reports, on-site assessment, or presentation and interview. In others this type of 'direct access' assessment substitutes for supervised training or part of an initial professional development programme provided that the basic entry requirement - such as a relevant degree or equivalent - has been met.

Trends

The level at which entrants are deemed professionally qualified has risen steadily since the beginning of the twentieth century, as documented by Millerson (1964). Since Millerson was writing there has been a clear move to graduate-level qualifications, and in over half the professions in the study over 95% of entrants now have degrees or postgraduate qualifications at least by the time they qualify. Only in nursing and arguably occupational safety and health are there significant entry-routes at level 5 of the EQF, i.e. the level of a higher education diploma in the UK. In some professions the primary educational qualification is now at postgraduate level or the equivalent (e.g. psychology, personnel and development, architecture, civil engineering, chemistry and accountancy), or the award of

chartered or equivalent status has been assessed as being at this level (conservation, library and information services, law, market research). The study suggests that this trend appears to be a genuine response to the increasing complexity of practitioners' work and the need for self-management and leadership rather than as Dore (1976) and others have argued simply a matter of credential inflation. In a few professions the use of postgraduate qualifications is nevertheless partly associated with the fact that practitioners tend to choose their careers after a broadly related first degree (such as business studies or sociology for personnel and development or market research, and art history or materials science for conservation). The graduate / non-graduate argument is currently being played out in nursing (in England, with Scotland and Wales having already moved to all-graduate courses); the graduate argument centres around things such as the need for practitioners to make critical decisions and work in and lead cross-professional teams, while arguments against can emphasise the practical nature of nursing, the adequacy of academic education to higher education diploma level, and claims that degrees produce nurses who are more oriented towards clinical and managerial aspects than to patient care.

Despite the increasing emphasis on graduate and postgraduate entry, there is also a clear trend towards a greater variety of routes to qualified status to accommodate for instance parallel and sequential pathways, recognition of prior learning including from adjacent and subsidiary occupations, mature entry, and direct access to qualifying assessments for already-experienced practitioners. Of the professions in the study seven had broadened their qualifying routes in the last decade and two more were intending to do so in the near future. Three had closed at least one route down, but two of these had replaced them with more flexible alternatives. A few professions have already moved to frameworks that rather than dictating specific routes enable practitioners to assemble pathways to suit their circumstances while meeting the professional body's requirements; an example is provided by the Chartered Institute of Wastes Management, where entrants obtain a relevant degree or equivalent by varied means, then engage in a programme of initial development that must address four themes (two technical, one management and one candidate-negotiated), with considerable flexibility in how this is done and what it covers. This type of approach is being discussed in at least two other institutes to replace what one describes as a confusing and overlapping set of qualifying routes and option pathways. Finally, the use of credit accumulation is becoming more common, not only in universities but also in some professional examinations where older rules about passing a minimum number of modules at one sitting and limitations on carry-forward are being replaced by a credit-based approach.

A noticeable shift of emphasis is taking place in several of the professions between the academic requirement and the requirement for practice. This generally takes the form of a better-specified and more rigorously assessed practising period, occasionally (two instances in the study) balanced by a reduction in the typical length of the academic course. There is also a tendency, if not to move as far as an integrated model of development, at least to bring practical concerns into the course in the form of approaches such as problem-based learning, the use of a 'practicum' that exposes students to aspects of real-world practice, and linking action-based learning in the workplace with academic accreditation. The need for theoretical understanding is reported as increasing rather than diminishing, but in most of the discussions in the study this was interpreted not as a requirement for more propositional knowledge but as a need for a deeper understanding of underlying principles, of practical theory and know-how, and of how to maintain currency and develop an evolving repertoire of abilities as a practitioner. In some professions this is also beginning to encompass a need for a

researching approach to practice. These observations agree with the notion of a shift in emphasis from a technical view of professional knowledge to one that is more reflective, enquiring and interpretive, and from a technocratic to a post-technocratic or practical model of professional development.

A fourth significant trend is appearing in the area of assessment. This is apparent both in academic and professional courses, and in the assessment of practice. Trends in academic assessment are well-documented (e.g. Atkins *et al* 1993, Yorke 1998) and these are generally reflected in professional courses in universities. Changes are also occurring in professional bodies' own courses where there is increasing acceptance of assessment methods other than written examinations (e.g. Lines & Gammie 2004), although as yet these rarely form the primary mode of assessment. Within exams approaches have appeared that move beyond problem-solving into assessing the ability to apply understanding into problematic situations, and also tend to be more creative in their format (open-book, pre-prepared case-studies, occasionally collaborative elements, etc). Even in the most conservative professions where a high level of value is attached to mastery of a specific knowledge-base, there is evidence of assessments requiring a practical and to some extent critical understanding.

Over the last ten years there has been a marked movement to having some form of practising assessment, either on an ongoing basis or summatively, or both. Of the 23 professions in the study, sixteen make some assessment of all candidates' practice, a further four do this in some of their qualifying routes, and one (law) is currently piloting formal assessment alongside its practice-based training period. Assessment methods are generally becoming more diverse and in many cases accommodating of individual circumstances, while there is a move towards assessment standards that are more robust and explicit while being at the same time more flexible. On the one hand the majority of professions are moving away from sign-off against a relatively skeletal set of criteria, while on the other there is a decline in highly detailed and atomistic approaches to assessment. There is also indication of a movement towards assessing proficiency in practice rather than looking for specific skills and attributes, although the extent to which this is occurring depends to an extent on the level of accomplishment at which the assessment is set: final assessments that expect perhaps three to five years' experience are typically more oriented towards holistic capability and proficient practice, while those that are integrated with initial training or follow shortly after it tend to focus on attributes.

Conclusions and issues

The overall picture emerging from the study is of fairly universal if unevenly-paced movement towards greater diversity and flexibility in terms of the routes and requirements for becoming professionally qualified. This is not unexpected given parallel trends in higher education along with the broader picture of changes in the nature of work and organisation, increasing demand for higher-level skills, and the trend over the last thirty years or so towards a more practitioner-centred view of professional knowledge. On the other hand there are raised concerns about needing to ensure the quality of practitioners at the point of entry to practice (or sign-off to practise independently), consistent with the idea of the 'risk society' (Beck 1992) and less healthily with recent obsessions with control and audit (Power 1997). To an extent these influences can be interpreted as antagonistic, with concerns that increased flexibility will lead to a reduction in standards and in the profession's control over the proficiency of the individual practitioner. Many of the examples in the study however suggest that

there is a more positive way forward, so that while it is entirely appropriate to focus on a high level of *rigour*, this does not imply *rigidity* of entry-routes and qualifying processes. In fact it is the move to clearer and more robust exit-criteria that is enabling professions such as civil engineering and conservation as well as surveying, landscape architecture and market research to increase their flexibility and evolve away from route-based proxies (pass course *x* and gain *y* years' experience) towards requirements that are more directly concerned with the ability to practise proficiently and capably rather than with the route taken (meet criteria *a*, *b* and *c*).

Nevertheless as professions move along this road there a number of issues are becoming apparent. The limited use of experiential and other non-graduate routes in some professions is not so much a symptom of a lack of potential entrants as that of correspondingly limited efforts to encourage and support suitable practitioners to go forward for qualified status. In a few cases the available routes are immature and impose inappropriate demands on practitioners (such as the need to demonstrate the propositional knowledge contained in the educational syllabus), but a more common cause appears to be a shortage of appropriate vehicles such as mentoring schemes, easily-understood guidance, helplines, on-line support and not least publicity. At present some pathways from associate occupations and apprenticeships are available in principle, but in practice there can be significant barriers to those who wish to progress, both pragmatically in terms of access to learning opportunities and pedagogically in terms of the style of learning and assessment within the opportunities that do exist. In a minority of professions there is also a shortage of appropriate support for graduates who are unable to gain formal training contracts or other positions with a good level of employer support, making it difficult to bridge the gap between the degree and professional accreditation.

Beyond these matters of implementation, the study also suggests that there is room for some professions to learn from practices that are well-established in others. As an example, some professional bodies in the financial sector maintain an absolute requirement to pass a series of written examinations, and while this is arguably both valid and efficient for perhaps the majority of candidates (and it is relatively easy to adapt for international application) it can be less appropriate for those who have reached the requisite level of competence through practice. Similarly entry-routes to some of the health professions are limited to full-time degrees, and routes might usefully be explored that are better geared to mature entrants and to progression from related occupations. More generally the potential offered by individually- and group-based negotiated work-based learning programmes could be exploited more effectively in various professional settings, particularly to provide integrated development routes that are moulded around individual work contexts rather than predesigned programmes. There is also scope in many professions for improving the nature of practice-based assessment so that it becomes more holistic and focused on overall capability and proficiency, as well as for developing supporting frameworks that are resilient in the face of job-changes and disrupted early-career patterns.

In some cases these types of changes will create a need for modified practices and pedagogies in higher education. A particularly strong need, well-recognised in some professional courses although given little attention in others, is to support and develop processes of reflection both in the sense of reflection on practice but also for many students reflecting on past or parallel experience and using it as a basis for developing theory and for continued learning. This may also need to extend to a more adventurous approach to giving credit for prior learning, so that rather than employing conventional accreditation processes past learning is brought into the programme to form part of the basis of the

learner's development (Armsby *et al* 2006, Lester 2007). Recognising that different learners have different starting-points and work contexts also suggests the need for more individualised programmes, something that is often facilitated through the use of learning contracts or agreements as described by Anderson *et al* (1998). Assessment practices may also need to be adjusted so that they recognise more individually-driven and potentially transdisciplinary learning (Brodie & Irving 2007). In some areas these developments will present challenges to university departments and to academics who may need to become facilitators, advisers and expert resources more than teachers.

Finally, an area that could be examined profitably in some professions is to promote entry-routes that offer attractive alternatives to full-time university study. With evidence of a levelling-off in the UK's age participation rate in higher education coupled with issues of growing student debt, there is a logic to encouraging mainstream routes to professional occupations that enable school-leavers and others to work towards qualified status while in employment. This type of pathway is dependent on employers' support, but as an example of what can be done the Association of Chartered Certified Accountants (ACCA) currently has 46% of its newly-qualified accountants coming through non-graduate routes, a proportion that it expects to increase over the next few years. ACCA and the other accountancy bodies are slightly atypical among professions with parallel routes in that their courses are not linked to higher education qualifications, but there is considerable scope – as evidenced for instance by part-time routes in surveying, architecture and civil engineering – for apprenticeship-type development routes to lead to graduate and postgraduate qualifications.

Acknowledgements

The research described in this paper was conducted in collaboration with the Professional Associations Research Network (PARN), who facilitated access to their members and provided a review panel. The views expressed in the article are those of the author rather than of PARN.

References

- Anderson, G., D. Boud & J. Sampson. 1998. "Qualities of Learning Contracts" in J. Stephenson & M. Yorke (eds) *Capability and Quality in Higher Education*. London: Kogan Page.
- Armsby, P., Costley, C. & Garnett, J. 2006. "The legitimisation of knowledge: a work based learning perspective of APEL," *International Journal of Lifelong Education*. 25, no. 4: 369-383.
- Atkins, M. J., J. Beattie & W. B. Dockrell. 1993. *Assessment issues in higher education* Sheffield: Employment Department.
- Bayliss, V. 1998. *Redefining Work* London: Royal Society for the Arts, Manufactures and Commerce.
- Beck, U. 1992. *Risk Society: towards a new modernity* trans M Ritter. London, Sage.
- Belfall, D. 1999. *Creating value for members* Toronto: Canadian Association for Association Executives.

Bines, H. 1992. "Issues in Course Design" in H. Bines & D. Watson (eds) *Developing Professional Education* Buckingham: Open University Press.

Boud, D. and N. Solomon. 2001. *Work-based learning: a new higher education?* Buckingham: Society for Research in Higher Education / Open University Press.

Broadbent, J, M Dietrich & J Roberts. 1997. "The end of the professions?" in J Broadbent, M Dietrich & J Roberts (eds) *The end of the professions: the restructuring of professional work* London: Routledge.

Brodie, P. & K. Irving. 2007. "Assessment in work based learning: investigating a pedagogical approach to enhance student learning," *Assessment and Evaluation in Higher Education* 32, no. 1: 11-19.

Carr, W & S Kemmis. 1986. *Becoming Critical: education, knowledge and action research* Lewes: Falmer Press.

Collins, M. 1990. "Changing conceptions in the sociology of the professions" in R Torstendahl & M Burrage (eds) *The formation of professions: knowledge, state and strategy* London: Sage.

Costley, C. 2007. "Work-based learning: assessment and evaluation in higher education," *Assessment and Evaluation in Higher Education* 32, no. 1: 1-9.

Dore, R. 1976. *The diploma disease: education, qualification and development* London: Allen & Unwin.

Handy, C. 1989. *The Age of Unreason* London: Business Books.

Houle, C. O. 1980. *Continuing learning in the professions* London: Jossey-Bass.

Hoyle, E. & P. D. John. 1995. *Professional Knowledge and Professional Practice* London: Cassell.

Larson, M. S. 1977. *The rise of professionalism: a sociological analysis* Berkeley CA: University of California Press.

Leitch, S. 2006. *Prosperity for all in the global economy: world-class skills* London: HM Stationery Office.

Lester, S. 2001. "The Professional Accreditation of Conservator-Restorers: developing a competence-based professional assessment system," *Assessment & Evaluation in Higher Education* 25, no. 4: 411-423.

Lester, S. 2002. "Negotiated work-based learning: from delivery systems to realisation systems," *Capability* 5, no. 1: 6-9.

- Lester, S. 2007. "Professional practice projects: APEL or development?" *Journal of Workplace Learning* 19, no. 3: 188-202
- Lines, D. & E. Gammie. 2004. *Assessment Methods Report* New York: International Federation of Accountants.
- Manpower Services Commission. 1981. *A new training initiative: agenda for action* London: HM Stationery Office.
- Marquand, D. 1997. "Professionalism and politics: towards a new mentality?" in J Broadbent, M Dietrich & J Roberts (eds) *The end of the professions: the restructuring of professional work* London: Routledge.
- Millerson, G. 1964. *The qualifying associations: a study in professionalization* London: Routledge & Kegan Paul.
- Power, M. 1997. *The audit society: rituals of verification* Oxford: Oxford University Press.
- Reason, P. & J. Rowan (eds). 1981. *Human inquiry: a sourcebook of new paradigm research* Chichester: John Wiley.
- Reeves, R. & J. Knell. 2006. "Good work and professional work" in J Craig (ed) *Production values: futures for professionalism* London: Demos.
- Revans, R. W. 1980. *Action Learning: new techniques for management* London: Blond & Briggs.
- Schiff, S. K. 1970. "Training the professional," *Chicago University Magazine* 42 , no. 4: 8-14.
- Schön, D. A. 1983. *The Reflective Practitioner: how professionals think in action* New York: Basic Books.
- Watkins, J., L. Drury & D. Preddy. 1992. *From evolution to revolution: the pressures on professional life in the 1990s* Bristol: University of Bristol Department for Continuing Education.
- Winter, R. & M. Maisch. 1996. *Professional competence and higher education: the ASSET programme* London: Falmer Press.
- Yorke, M. 1998. "Assessing capability" in J Stephenson & M Yorke (eds) *Capability and quality in higher education* London: Kogan Page.

Table 1. Professions included in the study.

<i>Area</i>	<i>Organisation interviewed</i>	<i>Status (2)</i>	<i>Est (3)</i>	<i>Members</i>
Accountancy	Association of Chartered Certified Accountants	Ch	1904	315,000 (4)
Architecture	Royal Institute of British Architects (1)	Ch	1837	30,500
Chemistry	Royal Society for Chemistry	Ch	1841	44,500
Civil engineering	Institution of Civil Engineers	Ch	1818	75,000
Conservation (of material heritage)	Institute of Conservation		2004 (1958)	3,000
Dentistry	British Dental Association	Reg	1880	32,000
Ecology	Institute of Ecology and Environmental Management		1991	3,000
Landscape architecture	Landscape Institute	Ch	1929	5,500
Law (solicitors)	Solicitors' Regulation Authority	Ch	2006 (1845)	131,000
Library and information services	Chartered Institute of Library and Information Professionals	Ch	2002 (19th c.)	20,000
Market research	Market Research Society		1946	8,000
Nursing	Nursing and Midwifery Council	Reg	2002 (1916)	686,000 (5)
Occupational safety and health	Institute of Occupational Safety and Health	Ch	1945	27,000
Personnel and development	Chartered Institute of Personnel and Development	Ch	1994 (1913)	130,000
Podiatry	Society of Chiropodists and Podiatrists	Reg	1938	10,000
Project management	Association of Project Management (1)		1972	15,000
Psychology	British Psychological Society	Ch	1901	45,000
Rating and valuation	Institute of Revenues, Rating and Valuation		1991 (1882)	5,500
Surveying	Royal Institution of Chartered Surveyors	Ch	1870 (1760)	140,000
Taxation	Chartered Institute of Taxation	Ch	1930	17,100
Teaching	General Teaching Council	Reg	1998	551,000
Waste management	Chartered Institute of Wastes Management	Ch	1898	7,500
Water and environment	Chartered Institute of Water and Environmental Management	Ch	1895	10,800

(1) Documentary research only.

(2) Ch = chartered, Reg = state-regulated

(3) The first date is when the named organisation was established (in non-chartered form if it subsequently received a charter), dates in parentheses are for predecessors or other relevant organisations.

(4) ACCA only, includes international members.

(5) The figure includes midwives and specialist community public health nurses that were not specifically included in the study.