The Professional Accreditation of Conservator-Restorers:
developing a competence-based professional assessment system

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Abstract

The accreditation and registration systems used by professional bodies serve a number of purposes including offering clients a measure of confidence, creating or maintaining a market niche, and raising the profile of the profession. The currently dominant technocratic model of professional accreditation normally places a high value on examining knowledge, with sometimes a secondary assessment of practice. A few UK professional associations are beginning to accept practice-based accreditation, generally as an alternative to their mainstream systems.

Conservators and restorers represent a small occupational group in the process of professionalising. A recent project has seen agreement on a practice-based system as the primary route to professional accreditation. This system draws on some of the principles established through UK occupational standards and National Vocational Qualifications, while incorporating modifications to aid clarity, improve the ease and rigour of assessment, and reflect intelligent, reflective practice. The approach used raises some issues and questions about how and on what grounds professional practitioners are accredited, and how occupational standards can be applied and assessed in a professional context.

Introduction

The PACR scheme (Professional Accreditation of Conservator-Restorers) represents the results of almost a decade and a half of professionalisation in a small, specialised and fragmented occupation. Unlike the largely examination-based systems of accreditation used in most established professions, the scheme assesses practice and understanding in the workplace. It draws on the occupational (competence) standards which have been developed in the UK during the 1980s and 1990s, and incorporates similar assessment principles to those underpinning National Vocational Qualifications (NVQs). However, the scheme has adapted both the occupational standards and the assessment approach to reflect needs identified by the profession and to ensure validity and rigour.

This paper outlines the context of the PACR scheme and its development, and highlights some of its potential implications. The approach used in the scheme raises issues relevant to the design and implementation of NVQs as well as to professional accreditation systems more widely.

Professional accreditation

Professional accreditation can be defined as the action of a professional body or registration authority in approving practitioners, normally after some form of examination or assessment, as fit or competent to practice. Accreditation has variously been seen as a means of creating a niche market or monopoly (Larson 1977), setting standards of service and providing a measure of protection for clients or the public through training, testing and codes of practice (Waddington 1985), or more simply

as encouraging training and recognition in a more open system of market relations. The effect of professional accreditation or registration from the practitioner's viewpoint ranges from access to a legally-controlled occupation (such as medical general practice, law or farriery) through to the satisfaction of being recognised in the profession as a qualified member, but with arguably little effect on employment, promotion or the ability to set up in practice. In between are what might be termed semi-controlled professions where unqualified practitioners may not use particular designations or undertake specific functions (such as architecture and accountancy), as well as occupations where accreditation, while far from compulsory, normally has a positive effect on the practitioner's career (such as personnel management and housing).

In the UK the most common pattern of accreditation is linked to what Bines (1992) terms the technocratic model of professional development. This approach normally involves the novice or would-be practitioner in demonstrating understanding of a knowledge-base, typically through written examinations, alongside or following which is a requirement for practical experience or training. In most professions the primary emphasis for assessment is on the knowledge-base, although full accreditation generally requires a period of practice in addition. There is a trend towards some form of practice-based or practice-related assessment (see for instance Eraut & Cole 1993), although in some cases this is no more than a post-experience written examination.

From a historical viewpoint, it is possible to identify three key conceptions of 'profession': a learned and moral one based on a broad classical education (the pattern for ancient professions such as medicine, law, priesthood and university teaching), a practical one based on apprenticeship and typified by the mediaeval craft guilds, and the predominant knowledge-based technical or administrative profession of the industrial era. According to Schön (1983) the use of academic training to add legitimacy to occupations' claims to professional status, combined with the dominance of scientific method and positivism as the rising form of academic knowledge from the mid-19th century onwards, has led to the technocratic or technical-rational model becoming the principal approach to professionality during this century.

Countering this trend, the last two or three decades of the 20th century have seen the growth of an alternative or at least supplementary conception based on practice and values, which to an extent draws on the classical and apprenticeship models while adding the dynamics of professional artistry, reflective practice and self-managed capability (Schön *op cit*, Lester 1995). This has been assisted by a range of factors, including the influence in the professional arena of 'softer' occupations such as teaching, nursing and social work, recognition of the roles of perspective, values, intuition and (subjective) judgement in professional work, the growth of individual career-paths and 'portfolio careers' (Handy 1989) among professionals, and not least evidence of the inadequacy of technical-rational knowledge for operation in the 'swampy lowland' (Schön 1987) of practice situations (e.g. Klemp 1977, Boreham 1990). Nevertheless, the knowledge-base remains the primary focus of assessment in most professions, and alternatives are proving slow to gain acceptance.

The 'competence movement:' NVQs and occupational standards

Over the last decade the UK has seen a rapid growth in the use of practice-based assessment particularly in lower-level vocational qualifications, essentially stemming from the then Manpower Services Commission's review of vocational qualifications (MSC 1986) and resultant development of

National and Scottish Vocational Qualifications (here abbreviated to NVQs). This movement towards occupational competence assessed through work activities, rather than knowledge and skills examined away from the workplace, was initially focussed on making lower-level vocational training more relevant to the needs of employers. Consequently most of the early effort in NVQ development went into qualifications relating to basic and semi-skilled work (levels 1 and 2 in the NVQ framework), and subsequently extended to more complex occupations (levels 3, 4, and in a few cases the highest level, 5).

The design principles of NVQs include a basis in competent practice as represented by industry-devised occupational standards, division into a number of 'units of competence' representing key work functions, (normally) assessment through evidence of workplace competence, and open access to anyone who is able to demonstrate the requisite level of proficiency. 'Occupational competence' in this context has been defined as:

"... the ability to perform the activities within an occupation or function to the standards expected in employment. (This includes)... the ability to transfer skills and knowledge to new situations...   organisation and planning of work, innovation and coping with non-routine activities... (and the) personal effectiveness...   to deal with co-workers, managers and customers. It stems from an understanding (that) to perform effectively in a work role an individual has to combine... performance of various technical and task components, overarching management of the various technical and task components to achieve the overall work function, management of the variance and unpredictability in the work role and the wider environment, (and) integration of the work role within the context of the wider organisation, economic, market and social environment" (Training Agency 1988).

While this definition of competence is not unproblematic particularly in its unqualified reference to "standards expected in employment," it suggests a fairly broad conception which reflects at least some of what is understood by intelligent practice. In practice, there is evidence to suggest that NVQs and occupational standards can be effective in capturing some aspects of higher-level work (e.g. Eraut & Steadman 1998 as well as the author's discussions with NVQ assessors and candidates), provided they are approached holistically rather than in an instrumental or piece-by-piece fashion. Nevertheless, there are issues in applying occupational standards both *per se* and specifically to 'professional' work.

Occupational standards have been criticised for their tendency to reduce complex and variable work to measurable activities, ignoring the contribution of the practitioner in defining the work function and negotiating standards in the practice setting (e.g. Burgoyne 1989, Winter & Maisch 1991); their failure to recognise the need for capable practitioners to go beyond the "maps and safety-nets" provided by standards and "create their own maps" (Lester 1995, 1999a); and their tendency to represent standards as culturally and socially neutral, when they can embody assumptions and norms which may be neither useful nor desirable (Elliott 1991, Issitt 1999). At the level of implementation, problems with NVQs can include a tendency towards fragmented and pedantic assessment, often driven by poorly implemented quality assurance arrangements; reliance on paper-based means of evidencing competence, leading both to a drawn-out process of assembling portfolios as well as to methods of assessment which can have limited validity; and difficulties in understanding and interpreting the obtuse language and often overdetailed specifications which were almost *de rigeur* for

occupational standards throughout the 1990s (e.g. Beaumont 1996, Eraut & Steadman *op cit*, Lester 1999b).

The Qualifications and Curriculum Authority (QCA), which is responsible for regulating occupational standards and NVQs outside of Scotland, has recently moved to address some of these problems through its revised design specifications (QCA 1999a), and there are several examples of occupational standards (e.g. Cultural Heritage National Training Organisation 1999) and assessment methods (e.g. Fowler 1997) which meet some of the above criticisms.

A further issue relevant to professional bodies is that the great majority of NVQs, 96.8% (QCA 1999b p9), have been awarded at levels 1-3; NVQs are therefore quite widely perceived as having limited relevance to 'professional' or other higher-level work. Higher-level NVQs have been most successful in management, where they have been incorporated in some organisations' management development strategies as well as appealing to some managers as a means of obtaining a practical qualification based on their work rather than on a course or learning programme. Although some professional bodies have been involved in standards development projects through QCA and through the sector-based National Training Organisations which develop the occupational standards, few have made direct use of NVQs and standards for professional accreditation. Those which have include the Institute of Personnel and Development, the Museums Association, and the Institute of Leisure and Amenity Management, which now accept NVQs as an alternative to academic qualifications as (at least partial) routes to membership.

Conservation: towards an accredited profession?

Conserving and restoring cultural heritage provides an occupation for an estimated 2000 practitioners in the UK, most of whom are members of at least one of eleven associations which variously perform the functions of professional body, trade association and learned society. Entry routes are now principally through graduate, postgraduate or higher technical qualifications, although a significant minority of practitioners enter via practical training or informal means, particularly at the more craft-based end of the profession. There has been interest in developing a common professional accreditation scheme for some time, with an inconclusive joint project taking place in 1986 and three of the bodies with predominantly private practice membership subsequently setting up independent schemes. The rationale for accreditation has generally been to provide a form of assurance to clients and the public as well as raising the profile and status of the profession against a background of fragmentation and to some extent perception as a craft or technician occupation.

The first significant milestone on the road to formal professionalisation was the publication of an international definition of the profession in 1984 (International Council of Museums Committee for Conservation 1984). In 1993 the UK professional associations formed an umbrella association called the Conservation Forum, later constituted as the National Council for Conservation-Restoration (NCCR). The European confederation of conservation and restoration organisations published a code of ethics in 1996, along with a recommendation that conservators should have a minimum of three years of full-time higher education. Although some European member bodies aspire towards controlled or semi-controlled status, in the UK at least it is likely to be more feasible to work towards a situation where accreditation becomes the norm for senior employed conservators and private practitioners working on public collections or grant-aided work.

Finalised occupational standards for conservation were published in the UK by the Museum Training Institute in 1996, including NVQs at levels 4 and 5; the latter was, after management, one of the first level 5 qualifications to be approved by QCA's predecessor, the National Council for Vocational Qualifications. A report (Barron 1997) was commissioned to identify whether and how the standards could be used in accreditation, and although it was somewhat optimistic in its view of how the NVQs and standards had been received among practitioners - only one conservation NVQ, at level 4, had been awarded by the end of 1998 - it concluded that there was an opportunity "to use the standards as a tool in an accreditation scheme even if the NVQ... was not to be achieved in its entirety" (*ibid* p11). One of the recommendations of this report was that a joint committee of professional associations should be set up to explore the practicalities of a common accreditation system based on occupational standards.

In parallel with these developments international discussions were taking place through the International Council of Museums (Cronyn & Foley 1996). These culminated in a Raphael bid being submitted to the European Commission by a consortium of representatives from Austria, Denmark, Finland, Italy, the Netherlands, Norway and the UK. The aim of this project, entitled FULCO, was to describe in assessable terms the work of the practising conservator in a way which was valid across Europe (Foley & Scholten 1998). The result was a framework based on seven key functions roughly parallel with the UK occupational standards, plus six general professional criteria covering areas such as values, understanding and intelligent practice; these latter drew on the widely-documented ASSET model developed for social work at Anglia Polytechnic University (Winter & Maisch 1991, 1996). Although the FULCO work was largely rejected by the majority of European bodies, it is continuing to inform developments in the Netherlands and the UK.

In 1998 three of the larger UK conservation bodies, the UK Institute for Conservation of Historic and Artistic Works (UKIC), the Institute for Paper Conservation (IPC) and the Society of Archivists, set up a joint accreditation group under the umbrella of the Conservation Forum. The UKIC and IPC also instituted temporary 'fast-track' accreditation schemes to enable practitioners with ten years' experience or more to qualify through a detailed application, vetted by two competent sponsors and a case officer. With additional support from the Museums and Galleries Commission and Historic Scotland, a joint scheme was developed and trialled during 1998 and 1999 ready for implementation in January 2000, when it would supersede the fast-track schemes.

Professional Accreditation of Conservator-Restorers: the PACR scheme

The joint PACR scheme was charged with being broadly acceptable across the profession, including the public and private sectors; supporting non-graduate as well as graduate entry; increasing the confidence of clients and the public in the professionalism of conservators and restorers; advancing the interests of the profession; and being manageable and cost-effective. The PACR project also included the development of a continuing professional development (CPD) scheme (see Lester 1999c).

Following engagement of the author as a project consultant and a series of initial discussions with Conservation Forum professional associations, an outline of a possible scheme was developed and put out to consultation with members of the three subscribing bodies. The responses were used to

inform the development of the scheme, which was further refined through trialling with 13 volunteer candidates and through a series of focus groups attended by 80 practitioners, related professionals and representatives of client organisations. The draft scheme documents were also circulated to a wide range of interested parties and posted on the UKIC web site, where they were accessed on more than 1400 occasions by the end of the development period.   A final feedback conference held in June 1999 was attended by 33 delegates.

Early agreement was reached on a practice-based scheme, principally because of the diversity of entry routes to the profession, the desire to provide a measure of confidence in the proficiency and judgement of accredited members, and the lack of a common standard for (and a general shortage of) internships and training posts. Views were also expressed from within the profession that a wide range of standards were being applied in higher education, along with problems of practical conservation being squeezed by an increasingly diverse curriculum (Cummings 1996);   in the absence of a powerful professional body which could influence universities and colleges, basing accreditation on practice was seen as a means of ensuring a common standard regardless of the training which had been undertaken.

While there was considerable interest in using the work which had been done to develop both the occupational standards and the FULCO framework, there was far less support for using the standards in their original state;   issues included excessive detail, difficult language and more critically a feeling that they failed to capture essential elements of intelligent practice and professionalism. Conservation has a wide base in science, the arts and humanities, as well as practical artistry and craftsmanship, and although it has some characteristics which fit with a technical-rational model, it has a strong ethical base as well as including a growing recognition of the importance of intelligent, reflective practice and professional judgement.

Box 1 **The PACR standards**

Conservation practice

1. Evaluating conservation problems in context
2. Developing conservation strategies
3. Developing and implementing interventive treatment
4. Developing and implementing preventive procedures
5. Managing work, resources and projects
6. Contributing to the interests of the profession

Professionalism

A. Demonstrating professional values and management of value-conflicts
B. Demonstrating intelligent practice and professional judgement
C. Demonstrating reflection, enquiry and personal professional development
D. Demonstrating sensitivity to the cultural context of materials and the values of people
E. Demonstrating effective, appropriate and sensitive communication

from National Council for Conservation-Restoration 1999

The resulting scheme (see box 1) drew on the structure of the FULCO project. It was based on six functional areas divided into a total of 17 standards or elements of competence based on the occupational standards (later reduced to 15), and five sets of general professional criteria. The functional standards were largely adapted from the occupational standards used in the level 5 NVQ, with rigorous removal of detail which was not critical to effective practice (box 2). It was originally intended to modify the functional standards to reflect the revised model being developed by the Cultural Heritage National Training Organisation (CHNTO, the Museum Training Institute's successor), but this proved unworkable for two reasons. First, the trials and consultations indicated a need to adapt and rationalise the standards particularly to make them more accessible to private practice conservators and to reflect specific issues such as health and safety, in a way which did not correlate directly with the CHNTO proposals. Secondly, the CHNTO framework (CHNTO 1999) dropped the level 5 standards for conservation practice, leaving a general level 5 NVQ for heritage management; conversely, the view in the profession was that accreditation needed to represent the ability to deal with the complex practical issues which had been a feature of the conservation standards at level 5 (box 3).

Box 2 **Specification of a functional standard**

6.2 Develop an area of expertise

This involves developing and communicating personal expertise in an area of conservation or in relation to a specific class of items which is relevant to current work or identified aspirations.

You will need to show:

- communicable expertise in your chosen field
- evidence of relevant research and updating in your field
- evidence of communication and sharing of your knowledge with professional and non-professional audiences
- appreciation of the significance of your field in relation to your work context, the conservation profession, and cultural heritage more generally.

from National Council for Conservation-Restoration 1999, drawing on Museum Training Institute 1996

Box 3 **Complexity**

Complexity can be inherent in the situation itself or in the approach taken by the conservator-restorer. Complex situations are typically those which:

- require choices between options which lead to significantly different outcomes
- present dilemmas and value-conflicts or require significant value-judgements
- present substantial technical problems, for instance in relation to unstable or degraded materials
- require a deep level of practical understanding to be applied to the situation
- require the marshalling and management of a wide range of resources.

To be 'complex' a situation need not contain all these factors, but it is likely to include more than one or have one present to a high degree. **Candidates must demonstrate that they can appreciate the issues inherent in complex situations and use intelligent, reasoned judgement in dealing with them**.

from National Council for Conservation-Restoration 1999

The assessment trials

The assessment method for the PACR scheme needed to be valid, fair, consistent and cost-effective, as well as demonstrating a level of rigour which would be acceptable in a chartered profession. There was also a strong view from practitioners that it should be open and provide opportunities for discussion, feedback and recording of any disagreements, consistent with the notion of peer assessment. Although the fast-track schemes in UKIC and IPC were producing a reasonable level of confidence within the profession and most sponsors were taking a searching and responsible approach to their role, the sponsorship method lacked the explicit level of rigour needed for a credible permanent scheme. On the other hand the approach used for the NVQs, which invariably involved candidates building a portfolio of paper-based evidence, was proving both time-consuming and unpopular; there were also concerns about accrediting practitioners purely on the basis of documentation, without assessors needing to see their studios or laboratories or any examples of practical work.

The assessment trials involved candidates making a detailed application against the professional standards, in theory supported by two competent sponsors, followed by a full-day visit by two assessors to the candidate's studio or place of work. Assessors, who were drawn from experienced members of the profession, took part in a one-day briefing before carrying out visits; two of the visits were also shadowed by the project consultant. During the visit the assessors examined the candidate's studio, work and documentation in some depth, discussed current and recent projects with the candidate, and questioned the candidate on principles and issues. In some of the visits short discussions were also held, with the permission of candidates, with the candidates' managers or other relevant colleagues. Assessment records were completed on the day and agreed with the candidate. Following the visit, completed application forms and assessment records were examined by a panel from the accreditation group who had not been involved in the initial assessments, assisted by the consultant.

The trial assessments indicated that the process was feasible and rigorous, if "exhausting" for both assessors and candidates. They demonstrated that a single well-prepared visit is sufficient to examine enough evidence to make a decision and gain an adequate picture of the candidate's understanding, practical knowledge and awareness of professional issues. However, the interpretation of standards and quality of recording varied between assessors, suggesting that further training and sharing of practice were needed. While for the trial no formal decisions were made about whether candidates met the accreditation criteria, there was an indication that some candidates were not meeting all the standards, primarily through lack of experience. On balance it appeared that in addition to higher education or other training typically between three and five years' varied experience was needed to reach the standard which had been set for accreditation.

In the finalised scheme (NCCR 1999) intending candidates are advised to attend an accreditation workshop and where practicable identify a mentor to assist them prepare for assessment; this is regarded in essence as a first filter, discouraging unprepared candidates from applying. The sponsor role was clarified and enhanced, with sponsors needing to be experienced and qualified conservators who have a reasonable knowledge of, or are prepared to familiarise themselves with, the candidate's work. An improved and more comprehensive but streamlined application and recording system was developed, and provision made for improved assessor training, feedback and updating (the

expectation is that assessors will attend two days of initial training plus an annual updating session). Provision was also agreed for candidates to be able to reject assessors with whom they felt there was a conflict of interest. Finally, although the assessors will report on the candidate's proficiency in each area of the standards, the accreditation decision (which can include referral in specific areas) will be made by the professional body assessment panel in order to ensure consistency.

The trial indicated that the most effective and economic method of assessment was to follow the sequence of projects and activities presented by the candidate, rather than to go through the standards in sequence; any areas which had not been covered could be returned to later in the process. Although this demanded more work and familiarity with the standards on the part of the assessors, it resulted in a more integrated and less artificial assessment. It also overcame fears expressed at the beginning of the trial that the general professional criteria (as opposed to the functional standards) were effectively not assessable; in practice it was possible to make what appeared to be reliable inferences about them from the mix of live evidence, documentation and discussion focussed on the candidate's work. Compared with portfolio-based assessment, the PACR approach offers a method which is robust, valid and efficient, although it may lose some of the advantages of efficiency if a referral requires a second visit.

A further issue which arose during the development phase was the extent to which knowledge could be assessed, and whether knowledge could be used to compensate for lack of practical evidence. The majority view in the initial stages of development was that accreditation should be concerned with depth of working knowledge or knowing-in-use rather than coverage of a formal knowledge-base. The trials indicated that this kind of knowledge - along with the quality of the candidate's conceptual understanding of his or her work - could be inferred with some confidence through discussion and observation on site, and lack of both practical knowledge of a topic and understanding of underlying principles could quickly be identified. The compensation issue particularly concerned candidates such as conservation managers and advisers who no longer worked on objects, and others whose current work did not cover the full range of areas described by the standards. It was decided to allow limited compensation, particularly where the candidate could demonstrate previous experience, based on a working level of knowledge sufficient to convince the assessors that s/he could do the work to a competent standard if needed.

Ongoing issues

One issue which was raised through the focus groups concerned whether credit could be given towards accreditation for holders of NVQs, and if not whether the PACR scheme would have a detrimental effect on NVQ uptake. On balance, there appear to be difficulties in giving credit into the scheme because of the holistic nature of the assessment process, particularly in respect of the professional criteria; however, it should be possible to re-use evidence submitted for an NVQ towards accreditation. If more formal relationships are to emerge, these are likely to be as a result of taking case histories into account as the scheme is reviewed.

The relationship of accreditation to courses and training was also discussed, with some practitioners feeling they should be granted exemption or at least an easier route on the basis of postgraduate qualifications. On balance the trials suggested that postgraduate training did not necessarily confer the depth of working knowledge expected of an accredited practitioner, and there was no particular

rationale for making concessions to postgraduates rather than for instance those who had qualified at a lower level through a work-based route. There was some interest in 'Part 1' accreditation as an entry requirement for PACR, with approved qualifications giving exemption; however, the course approvals seen as necessary to enable this were generally agreed as being outside the profession's scope for the immediate future.

A further issue concerns mutual recognition of qualifications in Europe. The majority view among the European associations is currently that recognition should be based on full-time higher education; by comparison, the PACR scheme is open to non-graduates but is set at a level of proficiency well beyond that which could be expected of a new graduate. The situation is further complicated by differences in higher education practice, so that for instance while it is possible for a UK graduate may emerge with minimal practical experience, a holder of a German conservation degree will have had substantial pre-entry and in-course exposure to practical work. 'Part 1' accreditation could provide a partial solution, although there is first a need for the PACR scheme to establish its credentials in the UK.

Finally, the PACR scheme will be open to applications from January 2000, and there are many lessons which remain to be learned from how it works in practice. The first of these will be its acceptability to the profession particularly as evidenced by the level of demand, followed by issues of manageability and cost-effectiveness. The validity of the scheme will also need to be reviewed, both internally in terms of quality assurance and professional standards and externally particularly in the extent to which it influences the behaviour of clients, employers, grant-giving bodies, course providers and other professions.

Conclusions

While it is too early to make conclusive statements based on the PACR scheme, it provides some indications of the scope for basing professional accreditation on standards of practice.

The PACR scheme is concerned with assessing a working level of proficiency and professionalism across a practicable breadth of activities, making it applicable to practitioners at least three and more likely five years on from their initial training. Compared with more traditional approaches which look for theoretical understanding of a broad knowledge-base, it probes depth of practical knowledge-in-use and understanding of principles underlying the practitioner's work. While not questioning the principle of studying a knowledge-base through college or university courses, examining formal or espoused knowledge some time into the practitioner's early career would seem to have little relevance to the ability to practice.

The PACR scheme suggests that while occupational standards can be used in professional accreditation, they need to be adapted from current formats particularly to remove trivial detail and focus on the core of effective practice, and augmented or at least interpreted in a way which reflects the intelligent judgement expected of professional work. Recent guidance from the Qualifications and Curriculum Authority (QCA 1999b) suggests that some of the earlier rigidity associated with standards and NVQs is now being abandoned, although there is a tendency to return to a syllabus-style knowledge specification rather than focussing on knowledge-in-use and effective practical understandings and mental models. Nevertheless, the unresolved tension as to whether NVQs

represent practice qualifications or threshold awards made at the end of a period of training (see for instance Lester 1999b), which has reflected back into the design of occupational standards, points to a minimum need for the professional body to rigorously examine whether the standards reflect what is required of a competent practitioner.

While practice-based accreditation may not be appropriate in all professional areas, it appears to provide an option where there are reasonably widely-accepted standards of practice. The principles employed in the PACR scheme may be worthy of consideration for post-experience professional practice assessment in professions where accreditation is based principally on written examinations. The PACR scheme suggests that it may also be viable for small and emerging professions, including where standard education and training routes have not become established or are inappropriate. Subject to further experience and research, rigorously implemented practice-based accreditation may be capable of providing a more valid and reliable means of inferring ability to practice to an acceptable standard than the more usual examination-based methods, and therefore have higher value to users of professional services.

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Acronyms

ASSET Accreditation of Social Services Experience and Training
CHNTO Cultural Heritage National Training Organisation
FULCO Framework of universal levels of competence
IPC   Institute of Paper Conservation
MSC   Manpower Services Commission
NCCR   National Council for Conservation-Restoration
NVQ   National Vocational Qualification
PACR   Professional Accreditation of Conservator-Restorers

QCA   Qualifications and Curriculum Authority

UKIC   United Kingdom Institute for Conservation of Historic and Artistic Works

References

Barron, A-M (1997) *Museum Training Institute professional body - NVQ/SVQ harmonisation project* Newcastle-under-Lyme, Parameter Research Ltd

Beaumont, G (1996) *Review of 100 NVQs and SVQs* London, National Council for Vocational Qualifications

Bines, H (1992) "Issues in course design" in H Bines & D Watson (eds) *Developing professional education* Buckingham, Open University Press

Boreham, N C (1990) *An investigation of methodological issues relating to specifying professional competence*   London, National Council for Vocational Qualifications

Burgoyne, J (1989) "Creating the managerial portfolio: building on competency approaches to management development," *Management Education and Development*   20 (1), 56-61

Cronyn, J & Foley, K (1996) "Standards of qualification in conservation: is commonality either necessary or possible?" in J Cronyn & K Foley (eds) *A qualified community: towards internationally agreed standards of qualification for conservation*   Northampton, International Council of Museums / English Heritage

Cultural Heritage National Training Organisation (1999) *Occupational standards for the cultural heritage sector*   Bradford, CHNTO

Cummings, A (1996) "The eternal triangle: professionals, standards and standardisation in conservation teaching" in J Cronyn & K Foley (eds) *A qualified community: towards internationally agreed standards of qualification for conservation* International Council of Museums / Northampton, English Heritage

Elliott, J (1991) *Action Research for Educational Change*   Buckingham, Open University Press

Eraut, M & Cole, G (1993) *Assessing competence in the professions* Sheffield, Employment Department

Eraut, M & Steadman, S (1998) *Evaluation of Level 5 Management S/NVQs*   Brighton, University of Sussex Institute of Education

Foley, K & Scholten, S (1998) *FULCO: a framework of competence for conservator-restorers in Europe* Amsterdam, Instituut Collectie Nederland

Fowler, B (1997) *New methods of assessing management vocational qualifications* Sheffield, Department for Education and Employment

Handy, C (1989) *The age of unreason* London, Business Books

International Council of Museums Committee for Conservation (1984) *The Conservator-Restorer: a Definition of the Profession* Copenhagen, International Council of Museums www.natmus.dk/cons/icom_cc/index/organiz/icomcc_e.htm

Issitt, M (1999) "Conceptualizing competence and reflective practice: a feminist perspective" in D O'Reilly, L Cunningham & S Lester (eds) *Developing the capable practitioner* London, Kogan Page

Klemp, G O (1977) "Three Factors of Success" in D W Vermilye (ed) *Relating Work and Education* San Francisco, Jossey-Bass

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

Lester, S (1995) "Beyond knowledge and competence," *Capability* 1 (3), 44-52

Lester, S (1999a) "From map-reader to map-maker" in D O'Reilly, L Cunningham & S Lester (eds) *Developing the capable practitioner* London, Kogan Page

Lester, S (1999b) *Vocational qualifications and entry routes in the land-based sector: uptake, progression, obstacles and opportunities* Kenilworth, Lantra NTO Ltd www.devmts.demon.co.uk/lbqs.htm

Lester, S (1999c) "Professional bodies, CPD and informal learning: the case of conservation," *Continuing Professional Development* 2 (4) www.mcb.co.uk/virtual-university-press/cpd/VOL2-Issue4-99/lester.html

Manpower Services Commission (1986) *Review of vocational qualifications* Sheffield, MSC

Museum Training Institute (1996) *Standards of occupational competence for the museums, galleries and heritage sector* Bradford, MTI

National Council for Conservation-Restoration (1999) *Professional accreditation of conservator-restorers* documents 1-4 Worcester, NCCR c/o Institute of Paper Conservation www.ukic.org.uk/pacr/

Qualifications and Curriculum Authority (1999a) *Developing occupational standards for NVQs and SVQs* London, QCA

Qualifications and Curriculum Authority (1999b) *Data News* issue 11 London, QCA

Schön, D A (1983) *The Reflective Practitioner: how professionals think in action* New York, Basic Books

Schön, D A (1987) *Educating the Reflective Practitioner* London, Jossey-Bass

Training Agency (1988) *The Concept of Occupational Competence* Sheffield, Training Agency

Waddington, I (1985) "Professions" in A Cooper & J Cooper (eds) *Social Science Encyclopaedia* London, Routledge & Kegan Paul

Winter, R & Maisch, M (1991) *The ASSET Programme* Chelmsford, Anglia Polytechnic / Essex County Council

Winter, R & Maisch, M (1996) *Professional competence and higher education: the ASSET programme* London, Falmer