The construction of qualification levels and frameworks: issues from three UK projects

Stan Lester, Stan Lester Developments, Taunton, UK
Higher Education Quarterly, vol 55 no 4 (2001), pp 396-415

Abstract

The United Kingdom is gradually moving to develop national frameworks of qualifications, with the aim of identifying all publicly-funded qualifications according to level, focus and where appropriate size or credit volume. Existing frameworks designed for use in higher education and occupational contexts reflect assumptions concerning things such as the nature of knowledge, the academic or occupational context of the learner, and the nature of access and progression within education and training. These assumptions do not hold for the full spectrum of qualifications, and need to be challenged if a fully inclusive framework is to emerge that is coherent while supporting requisite variety.

Introduction

The idea of qualification levels has existed at least tacitly as long as one award has been required for entry to a programme leading to another, as well as being inferred in the hierarchy of university degrees that has existed from mediaeval times. However, in the last two decades increasing interest in progression routes and transparency of awards has led to more systematic attention being given to qualification frameworks or systems of levels. In the United Kingdom, the promotion of credit accumulation and transfer (CAT) by the former Council for National Academic Awards (CNAA, the organisation responsible until 1992 for degrees awarded in the polytechnics) introduced a systematic notion of level in parts of higher education (see CNAA 1992). Outside of higher education, a four-level framework (later extended to five) of National and Scottish Vocational Qualifications was introduced in 1986; this represented a relatively new approach in which the awards were based on demonstrating competence in the workplace, and level defined according to the complexity and responsibility involved in the work functions to which they referred (see for instance Jessup 1991).

By 2001, these developments had evolved into two systems of levels claiming the title of 'national framework.' Within higher education (HE), the CNAA framework evolved into a set of levels for full qualifications led by the Quality Assurance Agency for Higher Education (QAA), the public body charged with maintaining quality and standards across UK higher education, and a broadly compatible set of credit levels (used to assign level to components and learning within, or capable of contributing to, qualifications) led by the four major university credit consortia that had carried forward the CNAA's credit accumulation and transfer agenda. Outside of HE, the National Vocational Qualification (NVQ) levels formed the basis of a framework overseen by the Qualifications and Curriculum Authority (QCA) and its partners in Wales, Scotland and Northern Ireland (see table 1).

Different approaches to notions of level are apparent in different frameworks. Traditionally a linear approach has been widely followed, based on assumptions about the order in which qualifications are taken and the need to have covered the content or mastered the skills represented by one before moving on to the next. More recently a criterion-based approach has become common, employing

Table 1. UK levels frameworks (outside Scotland)

The main systems of levels currently used in England, Wales and Northern Ireland. Equivalences are approximate only: see the discussions in the text on qualification and credit levels on page 1 and higher education and NVQ levels on pp 8-9.

Coverage	**Credit levels**: CNAA (1992) and credit consortia	**HE national framework**: QAA (2001)	**Credit levels**: NICATS (1997), InCCA (1998), Ufi Ltd (2001), SEEC (2001)	**NVQ levels and non-HE national framework**: QCA *et al* (2000b): (see note b).	
Higher education: postgraduate		Doctoral (5)	8	5	Higher
	M	Master's (4)	7		
Higher education: undergraduate	3	Honours (3)	6		
	2	Intermediate (2)	5	4	
	1	Certificate (1)	4		
Further education and school	0 *		3	3	Advanced
			2	2	Intermediate
			1	1	Foundation
			Entry		Entry

* 'Level 0' has been used in some credit systems to denote achievements below higher education level, typically relating to courses providing access to higher education and foundation studies within some HE courses.

level indicators or descriptors - i.e. notions of level assumed to be independent of linear progression - to indicate the general characteristics required of qualifications, or qualification candidates, at each level. This latter is more consistent with current trends in education and training, where people may register for and achieve qualifications on the basis of their experience and ability rather than through progression from previous awards. Nevertheless, there are difficulties in applying level criteria consistently without some reference to context or progression, and there are continuing arguments for the use of linear approaches (for an example see Winter 1993, 1994). The QAA and QCA frameworks, while aiming to be criterion-based, employ some features of both approaches; this is perhaps most strongly represented at the undergraduate end of the higher education framework, where the QAA and CAT levels were influenced by the staged notion of level present in the three years of a typical full-time degree, and in the academic strand of QCA's framework where progression is assumed from GCSE (General Certificate of Secondary Education, the standard school qualification at age 16) to GCE A-level (General Certificate of Education Advanced level), the most widely-used qualification for gaining access to degree courses.

The remainder of this paper draws on three recent projects that raise questions pertaining to qualification frameworks and levels, and concludes by identifying some implications for the emerging national frameworks. The first project involves the development of a professional accreditation scheme, which while not explicitly concerning itself with notions of level nevertheless raises a number of issues about qualifications and levels of achievement. The second is part of a national initiative to facilitate university accreditation of work-based learning, which has prompted a need for criteria to map independent learning against qualification level. The third concerns setting criteria for placing non-university, higher-level qualifications into a national framework. The discussion is principally based on practice in England, Wales and Northern Ireland; while most of the points raised also apply

in Scotland, there are differences particularly in the Scottish higher education framework's use of four rather than three undergraduate levels.

1. PACR: the development of a professional qualification

The Professional Accreditation of Conservator-Restorers (PACR) is a recent development by the National Council for Conservation-Restoration (NCCR), the umbrella body in the UK and Ireland for conservators of cultural heritage and works of art, to set up a credible and relevant professional qualification for the 3500 or so practitioners within its remit. It represents the culmination of over a decade of discussion and development work designed to raise the profile of conservation as a profession, improve standards of care for cultural artefacts, and provide a means by which users of conservation services can identify competent practitioners (see Lester 2000).

PACR, which leads to the designation Accredited Conservator-Restorer, was designed to assess professional practice rather than academic performance, and is based on workplace assessment. It draws on among other things some of the principles of NVQs, and in some respects occupies an analogous position to the postgraduate, post-experience assessment of professional practice used in the UK in some of the construction professions such as architecture and surveying; basically, these form the final entry-gate to full professional recognition, and require competence in the professional field as well as a sound practical knowledge of professional practice and ethics.

Issues of level were not uppermost in the development of PACR, other than that it should have a similar standing to the qualifications required in established professions, particularly in areas such as architecture and collections management with which conservators come into regular contact. The standard sought was that of a practitioner able to produce work of a high standard including in contexts of complexity and instability, to use professional judgement and engage with ethical issues and value-conflicts, and to take full responsibility for his or her work. The standards agreed by the profession drew among other sources on the level 4 and 5 NVQs in conservation; in themselves these NVQs have been noticeably unsuccessful, largely due to difficulties of implementation and perceived lack of relevance, and the level 5 qualification has since been withdrawn.

One issue raised in the development of PACR concerned the treatment of skills and knowledge built up through practical experience rather than formal training. PACR was explicitly required to be an assessment of professional practice, not an academic examination; however, it needed to reflect the depth of understanding and judgement required of practitioners, described as being of 'post-graduate level' (NCCR 2001). There was therefore a concern that the scheme should look for knowledge-in-use (Argyris & Schön 1974) as expressed through practice and discussion, rather than attempt to assess formal or declarative knowledge; given the level of experience required to achieve PACR, it was acknowledged that practitioners would have their own understandings and theories on which to draw.

More generally, this approach questions the assumptions made in both the higher education and (to a lesser extent) the NVQ frameworks that higher-level qualifications must necessarily assess declarative or espoused knowledge, rather than the knowledge actually employed by practitioners in the course of their practice and in reflection on it. The various descriptors used in higher education tend to include reference to knowledge-bases and disciplines, while the brief descriptions used in the NVQ framework now refer to the *application* of knowledge. Both suggest a technical-rational

perspective in which explicit and espoused knowledge is privileged over tacit or individual knowing, and the learner's role in creating and modifying knowledge is ignored or downplayed. Studies such as those of Argyris & Schön (op cit), Klemp (1977), Schön (1983) and Boreham (1990) indicate that as experience develops declarative knowledge becomes proportionally less important to effective practice; this suggests that when notions of level are applied to post-experiential learning they need to adopt a more constructivist or phenomenological approach to knowing, which respects the general and situational understandings used and developed by practitioners in their work.

A second issue related to the level at which the qualification was to be applied and assessed in practice. Discussions with assessors being trained to implement PACR suggested that the standards could be applied variously so that they could be achieved by a new graduate, someone with four or five years' additional experience, or so that few practitioners could actually achieve the qualification. This problem was found to be shared by other awards, where implementation at the desired qualification level depended on a largely tacit notion of what the level implied in a practical sense. In terms of the Dreyfus model of skill acquisition (Dreyfus 1981) with its five steps from novice to expert, a debate was taking place on whether the level of achievement required equated to advanced beginner, competent, proficient or expert; the eventual consensus was that the baseline level should be set at 'proficient.'

This raises a more general point relevant to qualification levels, in that traditionally these levels of achievement might be regarded as grades within a single level of qualification. In a qualifications framework based on constructs, i.e. factors such as complexity, autonomy, breadth, depth, predictability and so on which can be viewed across a scale, the distinction between these is less clear. For instance an 'advanced beginner' level of achievement in a higher level qualification may satisfy the requirements of an award at a lower level, while a particularly high level of achievement may meet the requirements of the next level above. While it is dangerous to assume that this will apply generally, there are likely to be many instances where qualification candidates achieve the criteria for an award above or below the level of the one they have entered for. This is particularly true in areas such as conservation, where significance is attached both to the complexity and criticality of the context the candidate is involved in engaging with, and to the standard of excellence of the finished work.

A final issue that emerged later in its development concerned the relationship of PACR to academic qualifications, raising some more general questions about level and progression. PACR was developed to meet the need for a qualification to endorse practice, rather than to denote achievement relative to any external framework; however, given a broadly agreed move across Europe towards a graduate conservation profession, there was some interest in whether and how it could assist practitioners who had not been through higher education to gain university qualifications. Informal enquiries suggested that accreditation might be considered as giving credit from approximately half the requirements of a master's degree, leaving the accredited practitioner to undertake (or demonstrate learning equivalent to) a research methods course, and complete a project or dissertation. Responses to this possibility from within the profession ranged from interest in establishing a credit link into a master's qualification, to scepticism based on the growing tendency for practitioners to enter already qualified at master's level. There was also concern that positioning PACR as a step towards a master's degree would devalue its status as a post-experience practising qualification, given that some master's graduates would regard it as a backwards step rather than as a different kind of qualification representing progression in terms of experience and proficiency.

This issue raises a question about the use of a single title - in this case, master's degree - for qualifications which have some commonalities but are designed for widely differing purposes. The archetypal UK master's degree is a one-year full-time course taken after an undergraduate degree, that extends or focuses the area studied at undergraduate level or (as in conservation) prepares the student for a profession or occupation. Another widely-used model is a part-time course, often with some flexibility of content, that is taken some time into the student's career and supports either specialisation or the taking on of management or similar responsibilities. A more recent development is based on using work activities through an action research or project approach, typically taken in mid-career, and designed to extend capability in the practitioner-learner's broad field of work. While in principle the qualifications gained as a result of these different kinds of programmes all meet nominally equivalent academic standards, the level achieved in terms of professional practice and insight into practical situations can be markedly different.

2. Learning through Work: matching independent learning to higher education levels

Learning through Work (LtW) is part of the wider University for Industry initiative announced by the UK government in 1997 (see Hillman 1996) and launched in England, Wales and Northern Ireland in 2000 as Learndirect (there are separate University for Industry developments in Scotland). LtW is designed to allow people to build negotiated qualifications around the needs of their work and careers, including through drawing on work activity as a vehicle for learning. While this is not in itself new and several universities already have significant experience in negotiated, work-based or work-linked programmes (see for instance Lyons 1993, Foster 1996, Osborne *et al* 1998, Doncaster 2000), it is innovative in developing a common approach and providing potentially large-scale on-line support. Although LtW is currently offered only through higher education institutions, its principles are designed to apply at all levels and be equally applicable to awarding bodies outside of higher education.

In the early stages of conceptualising a framework for LtW it was recognised that a means would be needed to map learners' achievements and intended learning in terms of level, without making assumptions based on previous qualifications or on curriculum content. Because both prior and planned learning would be based on individual outcomes, activities and objectives rather than on predefined units or curricula, this framework needed to be robust, consistent and generic: it would need to be able to allocate a provisional level to a proposed learning project as well as providing generic criteria for assessing whether submitted work was appropriate to the level of the qualification.

A study of the various levels systems and indicators then in use (Lester 1998) revealed a number of problems in that the way levels were described had various drawbacks in terms of applying them to work-based learning. Three key issues were apparent:

- Assumptions about producing ‘academic’ work. Some of the higher education frameworks assumed that learning would be demonstrated in the form of an assignment, essay or report, and were explicitly based on written outputs. While university-level work-based learning requires a requisite level of thinking and application, the means through which this is demonstrated need not be 'academic' in format.

- Assumptions about level of (work) responsibility and complexity. This was most marked in the NVQ framework, but it also occurs in other frameworks including some of the higher education

CAT frameworks. These two constructs also tended to be used uncritically as indicators, so that they would tend to refer to the context in which the candidate was located rather than his or her ability to take responsibility or engage effectively with complexity. In addition to the obvious misconception that context is the same as engagement with context, these statements could be highly limiting and disempowering in assuming that only people in 'high-level' roles could undertake high-level work.

- Assumptions about the nature and coverage of knowledge. While some frameworks recognised that “the term ‘knowledge’ was more relevant to the lower levels of learning” (NICATS 1997 p1) and focus instead on intellectual skills or capabilities, there was a fairly uncritical acceptance that candidates will be working within disciplines and with specific knowledge-bases. To an extent this reflects the issue of espoused knowledge versus knowledge-in-use discussed in relation to PACR, but it also means that level indicators are likely to favour areas of endeavour based on academic or professional disciplines rather than those regarded as less formal or shaped by individual interests, work portfolios or career paths.

Broadly, the study indicated that the way levels were described tended to reflect the needs of candidates on academic courses or being assessed against predefined occupational standards, and were not particularly geared to the needs of people in work who were engaged in constructing programmes to meet their individual needs and objectives. The solution adopted was to create a matrix of indicators based on the levels defined in the universities' Inter-Consortium Credit Agreement (InCCA, see InCCA 1998), i.e. spanning entry level to level 3 in the QCA framework plus the five higher education levels (see Ufi Ltd 2001; also see table 1). This matrix was based on five fields or constructs (see table 2), each containing between one and four level indicators (with the total number of indicators ranging from ten at entry level to 14 at doctoral level). Building on work already done in a small number of UK universities including Leeds and Middlesex, the LtW indicators were designed specifically to relate to practice-based learning and activities, while reflecting the level of thinking and action expected at the relevant level. For example, the master's level indicators for the field 'thinking and understanding' consist of:

- Using mastery of knowledge relating to, and extending into the wider context of, the area of practice.
- Developing and critically evaluating a range of practical theories, ideas and models, including to overcome dilemmas and find ways forward in problematic situations
- Researching, analysing and evaluating information to identify interrelationships between wider systems in which the area of practice is located.

(Ufi Ltd 2001, p23).

The LtW levels indicators were devised for an application which was not particularly well served by current ways of describing levels. They are not however totally general, as they assume a working context which would not be appropriate in full-time education. However, they do offer a way forward for mapping practical activities to academic level, without assuming an academic context to the work being undertaken. This extends to the highest levels, with for instance the description of doctoral work emphasising taking forward areas of practice, developing as a leading practitioner, and resulting in "new understandings or approaches which extend or redefine existing knowledge *or practice*" (*ibid*, p20; my italics).

Table 2. Learning through Work levels fields

Descriptions of the five fields used to define level in Learndirect Learning through Work. Each field is also described in terms of one or more indicators at each level (not shown) that indicate what a learner is expected to do at that level in relation to the given field (see text, page 6, for an example).

Field	Description	Interpretation
Complexity and responsibility	This concerns the level of complexity you are dealing with and what you are personally taking responsibility for (which can be different from the responsibility expected in your job).	Complexity and responsibility relate to how the learner engages with a situation, not to the situation itself. For instance, a learner in a fairly straightforward job may be demonstrating a high level of complexity and responsibility by going outside the job demands, while someone in a 'high-level' job need not be engaging with it in a way which demonstrates a high level of complexity or responsibility. The emphasis on different parts of this field are likely to vary with the type of work the learner is engaged in; compensation within the field is acceptable.
Scope	This is about whether you are for instance working within a closely-defined situation or considering wider implications and impact.	As with complexity and responsibility, scope relates to the learner's approach and actions, not to the context directly. The emphasis on different parts of this field are likely to vary with the type of work the learner is engaged in; compensation within the field is acceptable.
Thinking and understanding	This refers to the level of thinking and understanding you are using in analysing information, pulling information together and making decisions about what you are doing.	Thinking and understanding need to be related to practice: in a work-based learning context theory-in-use or thinking-for-action is more important than espoused theory, although particularly at the higher levels the statements require reflection on the thinking employed in action. Particularly where intuitive and tacit understandings are involved, they may be evidenced through action rather than explanation, although in many situations a balance of action and explanation will be required. The emphasis on different parts of this field are likely to vary with the type of work the learner is engaged in; compensation within the field is acceptable.
Investigation and evaluation	This concerns how you are investigating information and evaluating situations.	'Research' is used in the context of practical research: although the level of research expected is equivalent to that in an academic context, it may be presented differently (or used directly to inform action without being formally presented). The research criterion does not imply a distinct 'research project,' as research could be part of a development process, management plan or report, or other form of practical action.
Innovation and originality	This is about the level of originality and innovation you are bringing to your work.	Innovation refers to the originality of action for the context; it needs to be interpreted in the learner's context and does not imply something which is totally unique.

Source: Ufi Ltd (2001), p24.

3. QCA's 'higher levels' project: positioning qualifications in a national framework

The merger in 1997 of the National Council for Vocational Qualifications with the Schools Curriculum and Assessment Authority to form the Qualifications and Curriculum Authority (QCA) provided, for the first time in the UK outside of Scotland, a single body charged with regulating all public qualifications other than those made by the universities. One of the tasks recently taken on by QCA was to extend its national qualifications framework to the 'higher levels,' i.e. those qualifications that while not being awarded by universities are at a comparable level to higher education. In addressing this and following extensive consultation, QCA and its partners in Wales and Northern Ireland produced a set of design principles for admitting these awards to the framework (QCA *et al* 2000a).

The higher levels project was faced with a situation where two widely-used frameworks had emerged at the relevant levels (see table 1). The higher education framework is principally applied to university qualifications, but it is also used for some other higher-level qualifications awarded by professional and other awarding bodies but taught in universities, designed to provide credit into university awards, or where there is an aspiration for academic credibility. It is based on what was originally a linear notion of level (the first three levels equating to the three years of a full-time degree), and tends to assume that work is produced in an academic context. On the other hand the upper part of the QCA framework uses the higher two NVQ levels, which are based on work complexity and responsibility and assume the candidate is in a commensurate work role (QCA *et al* 2000b, p23). This framework has also become fairly widely used by some non-university awarding bodies to assign a level to their qualifications.

Although a nominal equivalence has been claimed between NVQ level 4 and the undergraduate higher education levels and NVQ 5 and master's level, the notions of level used in the two systems do not facilitate simple comparisons and may be better viewed in a matrix relationship (see Lester 1995 for a discussion of this in the context of professional qualifications). This difficulty has been recognised publicly by QCA for some time, for instance:

> "… attempts to equate these very different types of qualifications (NVQs are work based qualifications which recognise existing competences while degrees... are education-based qualifications) are often unconstructive and deny the very essence of NVQs"
> (QCA 1998, p7).

These views were broadly endorsed by work undertaken as part of the project, in which a sample of qualifications were mapped at an outline level to both level systems; while a partial correlation emerged, it was insufficient to claim equivalences (see table 3). More recent material produced by QCA (e.g. QCA 2001) simply shows the upper NVQ levels as equating to 'higher-level qualifications.'

The project highlighted a number of issues relating to allocating levels to qualifications. The first of these concerned the fact that neither framework used descriptions of level that spanned the full spectrum of higher-level qualifications particularly well; in examining the indicators used by the higher education CAT consortia, QAA and QCA, problems were encountered similar to those found in the Learning through Work project. The academic contexts assumed in the higher education levels did not fit easily with the work-related context of many higher technical and professional qualifications, while assumptions about work role and responsibility in the NVQ levels were clearly inappropriate in career preparation or extension awards. The constructs used also tended to favour respectively academic and managerial work over other kinds of endeavour.

Table 3. Mapping between levels: QCA and higher education frameworks

This table represents the mapping of 17 qualifications against the QCA levels and the higher education levels (including 'level 0', i.e. the level normally regarded as immediately below higher education). The figures in each cell of the matrix indicate how many qualifications map against each of the levels indicated: e.g. of the nine qualifications that mapped to level 4 in the QCA framework, one mapped to HE level 1, three to levels 1 or 2, and five to level 2.

		Higher education levels								
		0	**0/1**	**1**	**1/2**	**2**	**2/3**	**3**	**3/4**	**4 (M)**
NVQ levels	**3**	1	2							
	3/4									
	4			1	3	5				
	4/5						1	2		
	5									2

Note: Higher education levels equate to the QAA levels (the second column in table 1), with the addition of 'level 0'. The frameworks do not allow for intermediate levels, but the notation '3/4' etc was used in the mapping process where qualifications appeared to fall between or include characteristics of two levels.

Source: QCA higher levels project report (unpublished)

A second issue concerning compatibility related to the bottom higher education level. Concerns were encountered that this level overlapped with level 3 of the QCA framework, which equates to GCE or GNVQ Advanced level and National Diploma, qualifications normally seen as providing entry to higher education. The way QAA describes this level provides little suggestion that it requires anything more demanding that QCA's level 3, although the indicators used by some of the CAT consortia and the Learning through Work project do suggest a marginally higher level; however, this may be more a product of needing to make explicit distinctions having committed to an eight- or nine-level framework (see table 1) than any real difference between what is normally regarded as the upper end of further and school education and the lower end of higher education. In any case the three undergraduate levels appeared closer together than other levels in the national frameworks, and in allocating levels to non-university qualifications it was felt unwise to make narrower distinctions than those afforded by the two NVQ levels or by 'undergraduate' and 'postgraduate.' The project suggested that further exploration of this area is needed.

In the longer term, there is a degree of pressure to move towards a consistent system of levels, or at least ensure that the two systems are directly compatible. Among the purposes of the Bologna declaration of 1999, signed by 29 education ministers from across the European Higher Education Area (European Higher Education Area 1999), was greater compatibility and comparability of the systems of higher education including comparability between qualifications. The declaration made a distinction between first (undergraduate) and second (graduate) cycles of higher education, and many of the papers informing the declaration also recognised a distinction of level between conventional master's degrees and research-based awards, with some support for a '3+2+3' model (a first cycle of three years in full-time terms, second cycle of two years, and doctoral cycle of three years). Although the declaration was in some respects disappointing in basing its assumptions on linear, full-time models of higher education, it has reinforced the need for undergraduate, master's and doctoral levels

to be distinguished (see for instance Kirstein 1999, QAA 2000). This points towards ensuring that the framework used for higher-level qualifications outside of HE reflects at least the distinction between first- and second-cycle (there are few if any awards of this type that can claim to be at doctoral level), even if it does not distinguish between different undergraduate levels.

Towards an inclusive framework?

Currently the UK levels frameworks are strongly influenced by their historic antecedents: in the case of the higher education framework the CNAA CAT levels based on linear progression towards the full-time degree, and the NVQ levels with their assumptions about level of occupational role. The present frameworks continue to reflect these origins, and as a result cannot be regarded as fully fit for purpose when they are applied in the context of the full spectrum of UK qualifications. This suggests a need to move beyond some of the current assumptions towards a framework able to reflect the full range of purposes represented by existing and emergent qualifications.

The current situation relating to qualification frameworks is fragmented or at best dichotomous, with different frameworks applying to university awards and to NVQs, and with many qualifications outside of any obvious framework (or tentatively attached to one or the other). In this context there is merit in viewing the different frameworks as reflecting the different needs and purposes that qualifications serve, and having different kinds of criteria. Rather than attempting, in the words of 1990s rhetoric, to 'bridge the academic-vocational divide' and claim doubtful equivalences, it is likely to be more productive in this kind of system to respect the differences represented by the different frameworks and recognise that achievements in one do not equal achievements in the other; although there will be some rough correlations as well as crossover on an individual basis (e.g. Lester 1995).

On the other hand, there is also some merit in developing a single framework in which there emerges a common language about level of thinking, learning and action. Multiple frameworks may serve individual purposes well, but they can cause problems for transfer from one to the other ('academic' and 'vocational' pathways in 14-19 education and training are a case in point). They may also be too specific to accommodate emerging models of qualification; applying the current higher education framework to work-based learning (as in the Learning through Work project) provides one example, and using the NVQ framework for non-NVQ qualifications another. Creating a common framework is not merely a case of 'bridging' between different traditions, but will involve going beyond traditional distinctions such as academic and vocational, practical and theoretical. In doing this it also needs to avoid promoting a particular set of assumptions or dogmas, so that while qualifications relate within a common framework they retain requisite variety to meet the needs of individual learners and wider society.

Clearly, if such a framework is to be genuinely inclusive it will be self-limiting to perpetuate presuppositions contained in previous, more restricted qualifications frameworks. Assumptions cannot be made that high-level work is necessarily 'academic,' or revolves around declarative or espoused knowledge. There is also no place in such a framework for reinforcing social perceptions of the value of certain types of occupational role, or assuming that because a person is not in a 'high-level' job they cannot think, learn or act at a high level; similarly assumptions based on full-time and sequential models of education and training, or on age-related progression, are out of place in an inclusive framework. Finally, particularly at its highest levels the framework needs to give as much weight to development and creativity as to research and critique: as the Ufi conception of doctoral

work suggests, the highest-level qualifications can relate as much to leading-edge practice as to leading-edge research and theory.

Meeting this brief suggests seeking constructs that reflect levels of thinking and action regardless of the contexts in which they are applied. These constructs might be based on factors such as engagement with complexity, autonomy and scope of action, depth and breadth of thinking and understanding, scope of investigation or evaluation, and degree of originality and innovation (see for instance the Ufi interpretations in table 2). In some fields level will also be influenced by the level or criticality of action required, so that distinctions in level may reside in the difference between competence and expertise (Dreyfus 1981) or competence and excellence (Ebbutt 1995).

In terms of the levels themselves, European developments point to a need to make basic distinctions between what in UK terms are undergraduate, master's and doctoral levels. Beyond that, it is probably appropriate to distinguish between awards at the level of a bachelor's (honours) degree and sub-degree higher education or its equivalent (including the recently-introduced foundation degree). It is less clear whether there is a need for more than two undergraduate levels; both the Ufi and QCA projects concluded that the lower two higher education levels are difficult to distinguish outside of a linear model, and there may be an unjustified divide between further and higher education that is reinforced through a distinction in level. While breaking with the well-established notion of three undergraduate levels will be difficult, there is already some recognition in higher education that basing levels loosely on stages of a degree course is insufficient (e.g. Moon 1996).

Recent work both in the higher education sector and in QCA point towards a developing national credit framework (e.g. InCCA 1998, Southern England Consortium 2001). While opportunities for credit transfer, and recognition of achievements which do not qualify for full awards, are a necessary part of an inclusive framework, there is a need for thinking that moves beyond the simple quantitative model of level and credit size. The importance of coherence for the achievement of qualifications - based on coherence to individual learners, rather than to a presupposed curriculum or occupational role - needs to be stressed, while the numerical credit model must not become so pervasive that it creates unnecessary restrictions in qualification design.

Finally, the question needs at least to be raised about whether distinctions are needed based on the purpose of the qualification, rather than purely on level and volume. The example of master's degrees discussed in relation to the PACR project provides a case in point. Obvious challenges are created by adding another variable to the qualifications equation, but the present situation is that awards with very different functions and purposes, and representing substantially different kinds of learning outcome, can be indistinguishable by title.

A caveat

The idea of an inclusive qualifications framework, with awards placed by level, size and focus so that they are readily understood by potential candidates, employers and others with a stake in them, has become something of a holy grail in recent years, driven by agendas such as those of public accountability, transparency and the need for clear and accessible progression routes. Unfortunately the reality represented by the needs of individuals, employers, professions and by wider society does not necessarily fit into a neatly prescribed model, and the value of an award whether in intrinsic or extrinsic terms relates to factors that go far beyond the scope of qualifications frameworks.

Frameworks can aid understanding and progression and reduce unnecessary duplication in the qualifications market; but they can also reduce choice, mitigate against valued but unconventional awards, and create tensions by imposing what are after all artificial notions of level and size. If the notion of level becomes a pervasive feature of the public perception of qualifications, it may also reduce the esteem in which lower-level awards are held, regardless of their fitness for purpose; in turn this has scope to lead to credential inflation both through occupations and professions raising the level of the qualifications they require (cf Dore 1976), and through individuals chasing awards to achieve a higher position on the qualifications ladder rather than for the intrinsic value of the award or the learning it represents.

Overall these are probably not sufficient reasons to avoid pursuing the goal of an inclusive national framework, but they do provide a significant note of caution. At the very least, the developing framework needs to respect the need for a requisite diversity of awards, avoid taken-for-granted assumptions about the nature of level, and avoid creating cause for credential inflation.

Notes

This paper draws on work carried out by the author for the Joint Accreditation Group of the Conservation Forum and the National Council for Conservation-Restoration (PACR), the Department for Education and Employment and Ufi Ltd (Learning through Work), and the Qualifications and Curriculum Authority (the Higher Levels project). The views expressed in the paper are not necessarily those of the commissioning organisations.

Stan Lester is sole principal of Stan Lester Developments, an independent consultancy and research firm based in Taunton, UK, and is a visiting academic at Middlesex University. His work focuses principally on professional and work-related development and its accreditation.

Acronyms

CAT	Credit Accumulation and Transfer
CNAA	Council for National Academic Awards
GCE	General Certificate of Education
GNVQ	General National Vocational Qualification
HE	Higher education
InCCA	Inter-Consortium Credit Agreement
NCCR	National Council for Conservation-Restoration
NICATS	Northern Ireland Credit Accumulation and Transfer Scheme
NVQ	National Vocational Qualification
PACR	Professional Accreditation of Conservator-Restorers
QAA	Quality Assurance Agency for Higher Education
QCA	Qualifications and Curriculum Authority
SEEC	Southern England Consortium for Credit Accumulation and Transfer

References

Argyris, Chris & Schön, Donald A. (1974), *Theory in practice: increasing professional effectiveness* (London, Jossey Bass)

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

Council for National Academic Awards (1992), *CNAA Handbook* (London, CNAA)

Doncaster, Katherine (2000), The Middlesex University professional doctorate: a case study, *Continuing Professional Development* 3 (1), pp. 1-6

Dore, Ronald (1976), *The diploma disease: education, qualification and development* (London, Allen & Unwin)

Dreyfus, S. E. (1981), *Four models v human situational understanding: inherent limitations on the modelling of business expertise* (United States Air Force Office of Scientific Research, ref F49620-79-C-0063)

Ebbutt, Dave (1995), The COMEX Project, *Work-based Learning Network News* 1 pp 11-13

European Higher Education Area (1999), *Joint declaration of the European Ministers of Education*, Bologna 19.6.1999 (http://www.unige.ch/cre/activities/Bologna%20Forum/Bologne1999/bologna%20declaration.htm)

Foster, Elizabeth (1996), *Comparable but different: work-based learning for a learning society* (University of Leeds)

Hillman, Josh (1996), *University for Industry: creating a national learning network* (London, Institute for Public Policy Research)

Inter-Consortium Credit Agreement (InCCA) (1998), *A common framework for learning* (Cardiff, Higher Education Credit Initiative in Wales)

Jessup, Gilbert (1991), *Outcomes: the emerging model of education and training* (London, Falmer Press)

Kirstein, J. (1999), Information on learning structures in higher education in the EU/EEA countries, in I. Knudsen (Ed.) *Project report: trends in learning structures in higher education* (Confederation of European Rectors' Conferences and the Association of European Universities)

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

Lester, Stan (1995), Professional pathways: a case for measurements in more than one dimension, *Assessment and Evaluation in Higher Education* 20 (3), pp. 237-249

Lester, Stan (1998), *Developing guidance on levels to assist in accrediting independent and work-based learning under Ufi 'Route Three'* (Sheffield, Ufi Ltd: internal report)

Lester, Stan (2000), The Professional Accreditation of Conservator-Restorers: developing a competence-based professional assessment system, *Assessment & Evaluation in Higher Education* 25 (4), pp. 411-423

Lyons, Frank (1993), *The Partnership Project and the Partnership Programme* (University of Portsmouth)

Moon, Jenny (1996) Generic level descriptors and their place in the standards debate, in Higher Education Quality Council *Modular higher education in the UK in focus* (London, Higher Education Quality Council)

National Council for Conservation-Restoration (2001), *Professional accreditation of conservator-restorers: PACR 1, Introduction* (London, National Council for Conservation-Restoration)

Northern Ireland Credit Accumulation and Transfer System (1997), *The NICATS generic level descriptors with guidance notes* (Jordanstown, University of Ulster)

Osborne, C., Davies, J. & Garnett, J. (1998), Guiding the student to the centre of the stakeholder curriculum: independent and work-based learning at Middlesex University, in J. Stephenson & M. Yorke (Eds.) *Capability and quality in higher education* (London, Kogan Page)

Qualifications and Curriculum Authority (1998), *Data News* Issue 9 (London, Qualifications and Curriculum Authority)

Qualifications and Curriculum Authority, Awdurdod Cymwysterau Cwricwlwm ac Asesu Cymru, Council for the Curriculum, Examinations and Assessment (2000a), *Design principles for higher-level vocational qualifications* (London, Qualifications and Curriculum Authority)

Qualifications and Curriculum Authority, Awdurdod Cymwysterau Cwricwlwm ac Asesu Cymru, Council for the Curriculum, Examinations and Assessment (2000b), *A guide to the arrangements for the statutory regulation of external qualifications in England, Wales and Northern Ireland* (London, Qualifications and Curriculum Authority)

Qualifications and Curriculum Authority (2001), *Qualifications framework* (www.qca.org.uk/nq/framework/)

Quality Assurance Agency for Higher Education (2000), *Bachelors, Masters and Bologna* (Gloucester, Quality Assurance Agency)

Quality Assurance Agency for Higher Education (2001), *The framework for higher education qualifications in England, Wales and Northern Ireland* (Gloucester, Quality Assurance Agency)

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

Southern England Consortium for Credit Accumulation and Transfer (2001), *The higher education framework for England, Wales and Northern Ireland: guidance to support the use of credit within the higher education qualifications framework - a consultation paper* (www.seec.org.uk/guidelines.htm)

Ufi Ltd (2001), *Learning through Work framework: design principles for application in higher education* (Sheffield, Ufi Ltd)

Winter, Richard (1993), The problem of education levels (Part I): conceptualising a framework for credit accumulation and transfer, *Journal of Further and Higher Education* 17 (3), pp. 90-103

Winter, Richard (1994), "The problem of education levels (Part II): a new framework for credit accumulation in higher education", *Journal of Further and Higher Education* 18 (1), pp. 92-106

Total 7300 words