

Reconciling activity-based descriptions of competence with professional work

Stan Lester

Stan Lester Developments, Taunton, UK

Revised draft 28th August 2017 – pending in *Higher Education, Skills and Work-based Learning*.

Abstract

Purpose This paper discusses problems of applying competence standards to professional-level work, noting limitations in functional approaches and drawing on developments in professions and on a recent Erasmus+ project to propose a more adequate alternative.

Design/methodology/approach An approach to describing competence based on previously-reported developments in some self-governing, principally British professions was used to inform an Erasmus+ project that created competence standards for five higher-level occupations in different European countries.

Findings The original developments in professions and further work through the project both endorse a model of competence that is based on standards of practice, applies holistically to professional or occupational fields rather than focusing on work roles and functions, respects contextual factors in defining competent action, and necessitates situational interpretation and judgement.

Practical implications Descriptions of professional competence need to avoid being overly constrained by assumptions about the roles that practitioners might perform or the context in which practice takes place. They need to reflect the ethos and ethics of the field as well as more transversal aspects of professionalism. Descriptions of this type are likely to reflect factors that are also valued in higher education.

Originality/value The model of competence that is proposed appears to have a good level of validity for high-level professional work, and provides an approach to describing practice that is not limited to particular national contexts.

Key words Competence; practising standards; professions; practice; higher vocational education and training.

Introduction

A way of attempting to describe professional work that has become common over the last three decades or so in Anglophone and some European countries is the use of a competence framework or set of practising standards that sets out what it is that a competent practitioner is expected to be able to do. These kinds of framework can be described as activity-based or external in nature, as opposed to an 'internal' competence (or competency) description that typically describes the skills, knowledge or expected behaviours of the competent person (Mansfield 1989). They can be used as a means of conveying industry or professional requirements to developers of curricula and training programmes (e.g. Fretwell *et al* 2001), they can provide guidance for continuing development, and they can provide criteria for sign-off as a licensed or accredited practitioner (Lester 2009).

Critiques of competence descriptions of this type are well-established, with for instance a significant critical literature appearing in the UK as a response to the introduction of National Vocational Qualifications in the late 1980s and early 1990s. While some of this criticism takes issue with matters of detail that have since largely been resolved, important questions persist: both about the value of 'competence-based' approaches for underpinning vocational education and training (VET) (e.g. Wolf 2011; Brockmann *et al* 2011), and more fundamentally (and the focus of this paper) their ability to represent professional work in a way that is both valid and adequate for purposes such as those mentioned above. In particular, the situated and emergent nature of much higher-level work suggests that detailed, normative descriptions either of practice or of the attributes assumed to be needed for it can be inadequate and misleading (e.g. Carroll *et al* 2008; Sandberg 2009). This limitation presents a particular challenge for organised professions that are responsible for granting qualified status or a licence-to-practise, where there is arguably a need for concrete assessment standards. It is also relevant to higher education and higher VET in contexts where professional or industry bodies expect programmes to prepare students to meet the standards that they have set.

Some professional bodies particularly in the United Kingdom and to some extent Ireland have sought to develop activity-based descriptions of competence that are more adequate for complex work; these have been reported as reasonably successful at least for the purposes of assessment leading to qualified status (Lester 2014a,b,c). To explore whether they can have a wider application, both beyond the UK and in contexts other than accreditation and licensing, an Erasmus+ Strategic Partnership project was initiated in 2015. This project was developed following discussions between the author (in the UK) and colleagues in Greece and Poland, later joined by further partners in Germany, Ireland and Austria. It concluded in August 2017. While the frameworks developed in it are relatively untried compared with some of those used in British professions, evidence is emerging both to support the findings from the UK professional context and to indicate where activity-based models of competence on their own are insufficient.

Professional work

A problem in considering what professional work consists of is that neither the idea of 'a profession', nor that of 'a professional', is strongly differentiated from those of occupations and workers more generally. Various rationales have been put forward for the distinctiveness of professions and professionals (e.g. Carr-Saunders and Wilson 1933; Brante 2011), but equally there are arguments that neither can be defined precisely enough to make them special categories (e.g. Crook 2008). A

pragmatic interpretation suggests that while the terms are useful ones, they are better considered as representing part of a continuum rather than discrete occupational types that invariably share particular characteristics. Moreover, it can be argued that not only is it not necessary to be a member of a recognisable profession in order to be 'a professional', but that 'professional work' is concerned with working professionally – employing among other things independent, critical judgement, a commitment to the field, and ethical literacy – rather than necessarily with acting as a professional in a formal sense (Macklin 2009; Lester 2014b; Zheltoukhova and Baczor 2016). Studies of work that can be regarded as having 'professional' characteristics tend not to make a strong distinction between types of occupations, and senior practitioners (i.e. those with advanced skills who carry substantial responsibility or are in business on their own account) in craft, trade or administrative occupations are included by some authors in their discussions of professional work (e.g. Sandberg 2000; Bound *et al* 2013).

Recent studies concerned with the nature of practices, as opposed to the attributes of the people carrying them out, the structure of professions or occupations, or the education or training of practitioners (after Schatzki 2001), suggest a number of characteristics and trends that are commonly found in professional work. Of these, five have particular relevance to the discussion of competence that follows:

- Practice is situated, i.e. it cannot be divorced from the context in which it takes place (Wenger 1998; Sandberg 2000; Saltmarsh 2009; Evans *et al* 2010; and Hager *et al* 2012). Contexts can be both large-scale and long-term (for instance national cultures, economic, social and legal environments, and modes of organising in the relevant industry or occupation) as well as local and ephemeral (for instance relating to specific practice situations and how they are constructed and interpreted by the actors in, and influencing, them).
- Professional work has discretionary qualities (Billett 2009), i.e. there is a need for practitioners to decide how and often to what standard the work is done. This will involve reflection in and on action (Schön 1983); co-construction of both objectives and methods (Reeves and Knell 2006); and what Billett (2009) terms the judicious use of skills, i.e. deciding on what abilities and approaches to use in different situations.
- Professional practice has an ethical and social dimension that extends beyond complying with legislation and professional codes. The discretionary nature of much professional work requires not only the application of rules into diverse practice contexts, but the ability to read situations with 'ethical literacy' (Lunt 2008) and act with 'ethical competence' (Friedman 2007), including working from basic principles to overcome ethical conflicts and dilemmas.
- Professional work is increasingly complex, including in the sense of "the number of compounding factors that need or potentially need to be taken into consideration when enacting work tasks" (Billett 2009, p46) and the need to engage with 'wicked problems' (Rittel and Webber 1973) that do not have finite solutions. Added to this, practice can have an emergent nature (Hager, Lee and Reich 2012) where the actions that need to be taken are not knowable far enough in advance to be able to specify or rehearse in any detail.

- Practice has an increasingly conceptual nature that is partly driven by the ‘informating’ use of technology (Zuboff 1988), but also by the need for responsive judgement in the face of complexity and unpredictability (Evans 2015). As well as having a good understanding of the principles and practices underpinning their work, this requires practitioners to be able to approach it reflectively and from what might be termed a transdisciplinary standpoint (Gibbs 2015), i.e. from the perspective of deep immersion in and awareness of the practice context rather than only from that of applying a body of knowledge and techniques.

In the past, a distinction has sometimes been made between basic or restricted modes of practice, associated with a technical perspective that involves relatively straightforward knowledge-application, diagnosis and problem-solving, and extended or expanded ones that are more in keeping with the characteristics above (e.g. Schön 1987; Lester 1995). Restricted or technical-rational modes are typified by the application of formally-acquired knowledge to solve problems within a relatively predictable environment, while expanded or creative-interpretive ones emphasise the role of the practitioner in generating knowledge and creating ways forward in indeterminate and unpredictable situations. These conceptions have been used both as perspectives or models from which to view the entire arena of professional practice, and as modes of practice that respond to different contexts and demands (generally with an assumption of new practitioners working primarily in restricted mode). However, while these distinctions have some utility, the reality in many fields is that even new practitioners now need to be able to operate in expanded mode relatively quickly (Eraut 2008; Allen *et al* 2015); in conjunction with the five points above, this suggests that professional work needs to be considered as including creative-interpretive practice as a matter of course. As an aside, it is also likely to be the more routine kinds of professional activity associated with analysis, diagnosis and technical prescription that are more vulnerable to substitution by technology (Willcocks and Lacity 2015; Susskind 2016).

Activity-based approaches to competence: varieties, limitations and developments

The idea of ‘competence’ is at one level extremely simple (the Oxford English Dictionary definition, as used in the Erasmus+ project discussed later, is ‘the ability to do something effectively or successfully’), but it is also complicated by different traditions, interpretations, and applications. As previously mentioned one major distinction that has been made is between activity-based or ‘external’ approaches and ‘internal’ (or ‘competency’) ones. The former focus on what the competent person needs to be able to do to meet a social expectation, for instance to perform a work role or task or to be effective in a field of practice, while the latter describe things such as the skills, knowledge, behaviours and sometimes other attributes that underpin competent action (Mansfield 1989; Eraut 1998). In brief, external models tend to be more relevant when it is required to focus on a person’s practice, finding favour in workplace applications and in assessment for sign-off and licensing; for assessment and evaluative purposes they have the advantage of being concerned with what is done and to what standard, rather than with anything about the qualities or attributes of the person doing it (Mansfield 1989). On the other hand they leave open what is needed to develop to a point of competence and they do not translate directly into curricula or training specifications (Gonczi and Hager 2010). Internal models are more easily usable to support development (and as such they may be more readily understood by educators, trainers, and novice practitioners), while offering less confidence in the ability to pull together the relevant attributes to act competently in practice

situations; internal approaches are also typically less attuned to how experienced practitioners interpret their practice (Lester 2014c).

Activity-based models of competence can be traced back at least as far as the work of Taylor (1911) and Gilbreth and Gilbreth (1917) on the tasks that need to be carried out in order to perform work processes effectively. Task analysis in this tradition was used as a means of improving workplace efficiency throughout much of the twentieth century (part of Taylor's 'scientific management'), and task-level descriptions are still used to support training in specific skills and to define critical procedures in some professions (e.g. Jonassen *et al* 1999). A significant drawback of task analysis is that it assumes standardisation of procedures and limited discretion on the part of the practitioner, and in anything other than the most limited or procedural of jobs it will only succeed in describing very specific facets of what is needed to act competently. These limitations were one of the factors leading to the development in the UK of functional analysis, underpinning an approach to competence that aims to encapsulate work functions and roles without specifying the details of task processes (see Mitchell and Mansfield 1996). Functional analysis became the official basis of British occupational standards and National Vocational Qualifications, and it was also exported to several Anglophone and Commonwealth countries and, particularly via the hybrid Mansfield-Schmidt model (Mansfield and Schmidt 2001), within the European Union. The aim of a functionally-based competence model should be to describe something akin to what in the German VET system is referred to as *berufliche Handlungsfähigkeit* or 'occupational action capability', i.e. the ability to perform the work of an occupation effectively and ethically; however, its success in doing so has been debatable.

Functional approaches to competence have been criticised from their inception both from the perspective of undermining VET curricula by focusing on immediate job requirements, and (more relevant to the discussion here) for their inability to represent professional work adequately. The latter problem is well-documented particularly in the UK and Australia; criticisms include their tendency to be over-detailed, to contain limiting assumptions about the contexts in which the work takes place, and to downplay both the softer and the more intellectual aspects of competence (e.g. Burgoyne 1993; Hodkinson 1995; Grugulis 2000; Billett 2009; Boud 2016). A more fundamental objection is put forward by Sandberg (2009) and Carroll *et al* (2008). Sandberg notes that what he terms rationalistic descriptions of competence are oversimplified and do not adequately account for effective performance, something that is particularly apparent when they are compared with interpretive or relational analyses of how practitioners actually go about their work (e.g. Schön 1983; Wenger 1998; Sandberg 2000; and Sennett 2008). Carroll and colleagues make a similar point in contrasting the predominantly objectivist logic that underpins competence descriptions with the more constructivist logic of practice itself; their distinctions between competency and practice (Carroll *et al* 2008, p366) are very similar to those made by Lester (1995) in contrasting restricted and extended practice, suggesting that competence models lack adequacy for the latter. Following Schatzki (1997), a particular problem is that competence descriptions can attempt to impose an apparently objective 'representational' logic on top of the richer, messier and sometimes contradictory logic of practice, and as a result obscure what actually makes for effective action in context.

Nevertheless, over the last decade and a half some examples and principles have started to appear that suggest how the idea of (activity-oriented) competence might be reconciled with more advanced understandings of the nature of professional work. Professions have typically taken a more holistic view of competence than that implied by the performance of definable roles and functions, but with a

few exceptions this has been articulated more in the context of education, entry-routes and continuing development rather than through descriptions of practice itself. Two notable examples that attempt to describe competence in a way that is capable of interpretation into different practice contexts are the generic engineering standards developed by the Engineering Council (the 'UK-Spec'), and the professional standards for heritage conservation used by the Institute of Conservation (Icon). The UK-Spec (Engineering Council 2013) describes in a concise way what is needed at each of three levels (technician, incorporated and chartered engineer), and provides a common standard for award of these designations across the 37 or so engineering bodies that subscribe to the Council. The descriptions can be contextualised for the various engineering specialisms, but they have also been used directly as assessment criteria. The conservation standards (Icon 2007), which act both as general standards of practice and as criteria for awarding qualified status, were first developed in the late 1990s by drawing on functionally-based British occupational standards as well as on a European project (Foley and Scholten 1998) that articulated less tangible aspects of competence such as intellectual and ethical judgement. The engineering model informed the development of similar generic standards in scientific and environmental fields, while principles behind the conservation standards have been drawn on in professions as diverse as law, landscape architecture and vocational rehabilitation.

Some general principles can be identified from the above-mentioned practising standards, together with other recent examples (Lester 2014b). These are that the standards are relatively concise, in crude terms normally taking up no more than a dozen pages of text; they focus on core activities and common standards critical to practice in a profession or occupational field, rather than the detail of occupational roles and functions; they are normally designed to be applicable across the profession without resorting to a 'core and options' structure; they are written to be resilient to change, within reason accommodating developments in practice, technology and legislation; and while they are written in external, activity-based terms, they include general aspects of acting professionally, such as ethical conduct, professional judgement and self-management. These characteristics largely correlate with what, in the context of higher education, Yorke (2011) calls 'relativist' as opposed to 'realist' assessment criteria. Criteria of this type respect the situated nature of practice and lend themselves to interpretation in context; they can be applied to real-life situations without leading to distortion to meet the criteria; they require the integration of knowledge and skills into larger sequences of action; and they generally require deep understanding of the practice situation as a basis for action.

ComProCom: Communicating Professional Competence

The project ComProCom (Communicating Professional Competence) originated through dialogue in 2013-14 between the author of this paper and colleagues in Greece (a social scientist with a particular interest in social entrepreneurship, VET and the labour market) and Poland (from the continuing education department of one of the national research institutes). Both countries had adopted competence models that had been informed partly by British occupational standards, with greater success in Poland than in Greece, and the discussions indicated that there would be interest in exploring the 'second-generation' British model as described above. This interest related firstly to the model's potential to refine existing national approaches, and secondly to its relevance for two topical areas (respectively the management of social enterprises and the management and transfer of innovation), neither of which had been included in the range of occupations covered by the two

countries' existing competence standards. These discussions led to collaboration to produce an outline plan for a research and development project, which was then presented to potential partners in six further countries chosen to include different types of VET system and, in particular, approaches to occupational competence; involvement was secured from three of these, in Germany, Austria and Ireland (see Table 1).

Table 1. ComProCom partners and fields of activity

<i>Field</i>	<i>Country</i>	<i>Organisation type</i>	<i>Focus</i>
Business management	Austria	Commercial training organisation	Start-up and management of small enterprises
Chemical engineering	Germany	Sector training organisation	Certified <i>Industriemeister</i> in chemical engineering
Social entrepreneurship	Greece	State agency	Management of social enterprises
Training and development	Ireland	Professional association	The training and development function in organisations
Managing innovation	Poland	Research institute	Managing innovation in commercial and research organisations

The outline project plan was then worked up as an Erasmus+ Strategic Partnership proposal, which received funding via the Greek State Scholarship Foundation (IKY) for two years from September 2015. While it referred to relevant literature on occupational and professional competence, in order to avoid dictating a specific approach in advance the proposal for ComProCom simply stated that:

“The project aims to improve the way that descriptions of competence match how professions and occupations work in practice, in particular in moving away from descriptions of tasks and responsibilities to considering core capabilities that have wide application within each field, are not limited by assumptions about the organization and context of individual jobs, and are resilient to changes in practice and technologies.”

(ComProCom Partnership 2015, p3).

ComProCom focussed on 'higher-level' occupations, for convenience defined as those that could be considered as having features equating with European Qualifications Framework level 5 and above. The core activity of the project was for each of the five partners, supported by the sixth (represented by the author) via knowledge transfer and individual support, to develop a set of competence standards for a field of activity that they were working in. In all cases the development process involved engaging practitioners in the design of the standards, along with peer review, consultation, and small-scale trialling. This process was supported by research on the use of occupational and professional competence models in the partner countries (Religa and Lester 2016, Lester and Religa 2017). Frameworks, theoretical models and emerging findings were disseminated and discussed by the partners as the project progressed, engaging with practitioners, academics, professional bodies and state agencies in each country. The project also produced a methodological manual, related resources, and an associated developer training course, to enable the finalised approach to be taken forward after the project end.

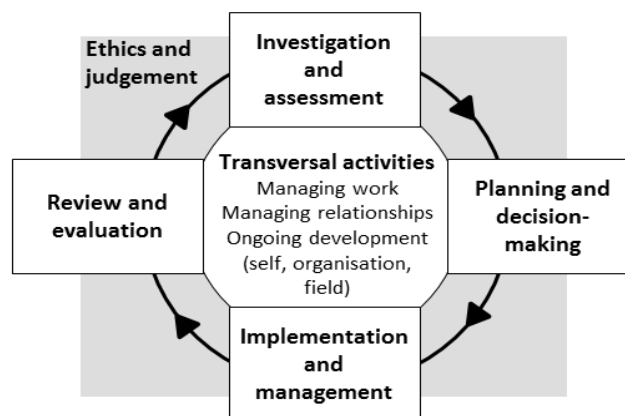
Further detail of the approach to be used in the project was agreed following a presentation of general approaches and concepts in the first project meeting in November 2015, where a discussion between

the partners agreed three basic principles that would inform the development of their competence frameworks. These were:

- A professional or occupational rather than an educational orientation, in the sense that the project would focus on developing practising standards for fields of work rather than learning outcomes or programme specifications.
- An external perspective on competence, as previously described.
- In principle, a field-level rather than a role-level approach. In most cases this was agreed as taking the form of a single framework applicable to all practitioners in the field, rather than a core-and-options or similar structure. However, two partners in particular expressed reservations about how this would work in fields that were commonly defined by reference to organisational functions or occupational roles.

There was also some debate among partners about the position of knowledge in relation to external competence standards and whether knowledge should be included explicitly as part of the standards. British occupational standards for instance, and more so those based on the Mansfield-Schmidt model, generally included some sort of knowledge specification; however, beyond occasional reference to key principles in a 'judgement and ethics' or similar section this was not normally a feature of the professional standards that informed ComProCom. It was recognised that simply appending propositional knowledge and know-how at the level of discrete activities was neither adequate for informing curricula, where attention is needed to the knowledge-structure of the entire field, nor for assessing practitioners, where it is normally more appropriate to explore the knowledge-in-use actually employed in framing and making practice decisions. On balance the partners agreed that the standards developed within the project would describe practice alone, while basic guidance was retained in the project manual about using practising standards to inform the development of knowledge structures.

Figure 1. A cyclic structure for describing the work of a profession or occupational field.



From ComProCom Partnership (2017), drawing on Lester (2014a) and Koniotaki (2017).

For the presentation of the standards, a cyclic structure that had emerged from British professions, similar to that shown in figure 1, was offered as a template with the caveat that it may not be suitable in all areas; examples were provided including some based on this model and others that followed a

more thematic approach. Several rules-of-thumb were also agreed including three levels of detail (main headings, key activities, and critical factors and explanations), a guide length of no more than 12 pages, and the use of active, second-person verbs. Partners were also made aware of the possibility of using 'subsets' of the framework with different detail to represent for instance different levels of work (as with the three-level engineering standards referred to earlier), and of the potential for using a novice-to-expert or similar scale to aid self-, peer or formal assessment for various purposes. This guidance is summarised in the final version of the project methodological manual (Lester 2017).

By the end of the first year each partner had assembled a working group from their respective field, researched the key activities undertaken in the field, and developed a tidy draft of their framework ready to undergo consultation and testing. In the second year, consultation took place with representatives of the relevant practitioner and stakeholder communities, and a small-scale trial – in most cases using the framework as a self-assessment tool – was also carried out. Following finalisation of the frameworks along with associated resources including a developer training course and the methodological manual, the project reported in August 2017. The project outputs can be found at <http://www.comprocom.eu/products/>, and a summary of the project process and matters raised is provided in ComProCom Partnership (2017).

Results and matters raised

In terms of structure, all frameworks followed the first two principles outlined above, i.e. a professional or occupational focus and an external perspective on competence. The main differences concerned the breadth of coverage together with the extent to which a universal, field-level approach was followed. Four of the five frameworks used a cyclic model (as in figure 1), with between four and seven stages supported by transversal areas of activity. In principle, these frameworks can be described as field-level and universal in that most accommodate multiple roles or contexts within a single structure; however, the breadth of the fields varied and none were as ambitious in scope as, for instance, the UK engineering standards.

The fifth framework (training and development) followed a slightly different approach; it consisted of nine broad functional areas five of which formed an activity cycle as in Figure 1 (identifying needs, planning, design, delivery, and evaluation), with the remainder involving management and administration (strategy, leadership, financial management, and quality assurance). These were mapped on to four major role-types within the training and development function. One of the aims of this framework was to support career planning and continuing development, and there was a concern that while the framework should represent the work of the profession as a whole, it should also draw out the differences between the role-types to support progression between them.

The frameworks have not yet undergone any significant use in practical conditions, but some observations can be made from examining the outputs themselves and from the results of consultation and trialling. One observation from comparing the ComProCom frameworks with each other and with some of the British exemplars mentioned above is the variable extent to which the frameworks reflect both a specific ethos and a sense of underlying professionalism and ethics. In principle this seems to be strongest when the field is a coherent community of practice with a widely-understood *raison d'être*; so for instance heritage conservation and landscape architecture (among

British professions) are particularly strong in this respect, as is social entrepreneurship among the ComProCom examples. On the other hand some of the business-based fields in ComProCom are more dominated by concerns with compliance. A second point that can be made is more pragmatic, and concerns the relative ease of describing tangible, task-oriented activities as opposed to those that aim to reflect underlying principles. This is more of a learning-point for the mechanics of the project, but it is relevant more generally to developing competence descriptions in fields that lack the sense of ethos that is present in some professions.

The matter of field-level versus role-level descriptions has already been mentioned, but a further point for consideration is how 'fields' become defined in different contexts and for different purposes. Even in formalised professions there can be debate about whether the field should be described at the level of, for example, law in general or separately for solicitors, barristers and legal executives, or engineering, chemical engineering, or (as in ComProCom) for more specifically for operational management of chemical plants (a formal occupation or *Beruf* in the German VET system). In practice, the starting-point for defining fields may be best identified where clear communities of practice have grown up (as in British and Irish professions or German and Austrian *Berufe*, as well as in more transversal areas such as innovation management) rather than through an attempt to impose standardisation through occupational classifications and policy-level sector bodies (Lester and Religa 2017). Taking this approach inevitably leads to functional overlap (as for instance with social entrepreneurs and owner-managers of start-up businesses, or architects and surveyors) as well as differences in scale, span and level of detail (e.g. family mediators compared with solicitors). However, it is more likely to lead to standards that are meaningful and usable for practitioners, employers and other stakeholders in the relevant field. The idea of a professional or 'centre-outwards' as opposed to a 'bounded-occupation' perspective (Lester 2014b) is relevant here; it involves viewing occupational fields as communities that coalesce around a particular ethos and set of core capabilities (and therefore may well overlap, but with different or complementary perspectives rather than common 'competences'), as opposed to them being defined by functional and role boundaries.

Immediate feedback from practitioners has generally been positive across all five fields addressed in the project, suggesting that the descriptions that were produced are reasonably adequate representations of their fields. There has not been any sense of the standards being too limiting in terms of presuming specific contexts or roles, although this is subject to how well consultees and trial participants both represented the breadth of the intended field and engaged with the framework in depth, and it is subject to further testing through practical application. To put this in context, the UK conservation framework was trialled and consulted on extensively, but it took revisions after two and a further five years of use to arrive at a representation that was agreed as reflecting the profession accurately (and which has subsequently not needed amending for over a decade).

Conclusions

To draw on the experience from both UK professions and the project ComProCom, there appear to be two major factors that assist activity-based descriptions of competence to have adequacy for professional work. The first of these is starting from a meaningful field of activity and working at the appropriate logical level for what is being described. For professional or occupational fields, this means developing standards that apply holistically throughout the field, rather than considering

functions that apply to particular specialisms, work roles and contexts. The main benefits of working at this level are that it avoids – or at least enables the avoidance of – assumptions that practitioners work only in specific contexts and bounded work roles, while allowing and potentially necessitating interpretations that reflect the situated nature of practice, the need for practitioners to exercise judgement according to context, and the possibility in many fields of working outside, between or across any envisaged roles. Standards of this type also tend to be able to accommodate changes in practice, technology, regulations and so forth because they avoid framing activities around specific approaches, laws or customary practices; typically, supporting guidance might need to be updated but less so the standards themselves.

The second factor is being able to imbue the description with a professional ethos or sense of responsibility and good practice at a level appropriate to the application. In professional communities where there is a strong sense of coherence and purpose, practising standards where this aspect is weak are likely to be perceived by practitioners as being of poor quality and not reflective of the need to act in a professional manner, however applicable they are otherwise. This is also partly bound up with the first factor; once the idea is accepted that professional work cannot be defined adequately at the level of roles, functions and tasks, the underlying principles and ethics become more central and are in a sense part of the 'glue' that holds the standards together and ensures their robustness. On the other hand there is in some fields much less of a sense of professing to an area in common, and here it may be more challenging – though still necessary – to develop a central sense of purpose and good practice that is sufficiently meaningful to practitioners. A second part of this 'glue' involves general or transversal aspects of working professionally. These aspects include things such as managing work and processes, managing relationships, and ongoing development. They are not necessarily generic, as they will differ according to the field of work and the level that the practitioner is operating at; managing work will look quite different, for instance, in the context of chemical engineering compared with training and development, while ongoing development could apply at an individual level, involve organisational or team development, or include contributing to advances in the field of work itself. However, transversal activities do appear to be capable of being described in fairly common terms, and, reflecting Yorke's relativist criteria discussed earlier, these typically have parallels with generic attributes that are valued in higher education (see for instance Bravenboer and Lester 2016).

Finally, to return to the points made by Carroll *et al* (2008) and Sandberg (2009), it is perhaps inevitable that any statement pertaining to professional competence that aims to make generalisations about practice will be sanitised and partial. However, by using appropriate levels of description that set essential standards while leaving room for contextual interpretation, it is possible to identify the social expectations that practice sets out to meet while also recognising that it is situated, individual, and sometimes messy and contradictory.

Author

Dr Stan Lester has been a consultant, researcher and developer in professional and work-related education since 1993. He works with professional bodies on professional standards and self-regulatory matters, as well as with universities, VET agencies and other organisations in the UK and more widely in Europe. His firm was the UK partner for the project ComProCom. He can be contacted via s.lester@devmts.co.uk.

Acknowledgements

ComProCom was a European Union Erasmus+ Strategic Partnership Project (2015-1-EL01-KA202-013960) comprising the Hellenic Agency for Local Development and Local Government (EETAA), Greece (the project leader); SBG-Dresden, Germany; the Irish Institute of Training and Development (IITD); the National Research Institute for Sustainable Technologies (ITeE-PIB), Poland; die Berater, Austria; and Stan Lester Developments, UK. Thanks are due to the other members of the partnership who contributed to the developments discussed in this paper, in particular Anna Koniotaki and Georgia Gonou (EETAA), Jens Hoffmann, Anke Menning and Sven Ebert (SBG-Dresden), Sinead Heneghan and Angela O'Donovan (IITD), Dr Jolanta Religa (ITeE-PIB), and Erol Koc (die Berater). ComProCom was supported by funding from the European Commission's Erasmus+ programme, via the State Scholarships Foundation (IKY) in Greece. European Commission support does not constitute an endorsement of the contents of this article, which reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained in it.

References

- Allen, H., Magnusson, C., Horton, K., Evans, K., Ball, E., Curtis, K. and Johnson, M. (2015), "People, liminal spaces and experience: understanding recontextualisation of knowledge for newly qualified nurses", *Nurse Education Today*, Vol. 35 No. 2, pp. 78-83.
- Billett, S. (2009), "Workplace competence: integrating social and personal perspectives", in Velde, C. (Ed.), *International perspectives on competence in the workplace*, Springer, Dordrecht, pp. 33-54.
- Boud, D. (2016), "Taking professional practice seriously: implications for deliberate course design", in Trede, F. and McEwen, C. (Eds.), *Educating the Deliberate Professional: preparing for future practices*, Springer, Dordrecht, pp. 157-173.
- Bound, H., Rushbrook, P., Waite, E., Evans, K., Lin, M., Karmel, A., Nur, S., Sivalingam, M. and Seng, A. (2013), *The entrepreneurial self: becoming a freelancer in Singapore's film and television industry*, Institute for Adult Learning, Singapore.
- Brante, T. (2011), "Professions as science-based occupations", *Professions and Professionalism*, Vol. 1 No. 1, pp. 4-20.
- Bravenboer, D. and Lester, S. (2016), "Towards an integrated approach to the recognition of professional competence and academic learning", *Education + Training*, Vol. 58 No. 4, pp. 409-421.
- Brockmann, M., Clarke, L. and Winch, C. (2011), *Knowledge, skills and competence in the European labour market*. Routledge, London.
- Burgoyne, J. (1993), "The Competence Movement: Issues, Stakeholders and Prospects", *Personnel Review*, Vol. 22 No. 6, pp. 6-13.

- Carroll, B., Levy, L. and Richmond, D. (2008), "Leadership as practice: challenging the competency paradigm", *Leadership*, Vol. 4 No. 4, pp. 363-379.
- Carr-Saunders, A. and Wilson, P. (1933), *The Professions*, Clarendon, Oxford.
- ComProCom Partnership (2015), *Erasmus+ application form: call 2015*. Unpublished proposal submitted to IKY (State Scholarships Foundation), Athens, 30th March 2015.
- ComProCom Partnership (2017), *Developing professional competence standards: final report of the project ComProCom*, EETAA, Athens (publication of the project ComProCom, www.comprocom.eu).
- Crook, D. (2008), "Some historical perspectives on professionalism", in Cunningham, B. (Ed.), *Exploring professionalism*, Institute of Education, London, pp. 10-27.
- Engineering Council (2013), *UK-Spec: UK Standard for Professional Engineering Competence*, Engineering Council, London.
- Eraut, M. (1998), "Concepts of Competence", *Journal of Interprofessional Care*, Vol. 12 No. 2, pp. 127–139.
- Eraut, M. (2008), "Learning from other people in the workplace", in Hall, K., Murphy, P. and Soler, K. (Eds.), *Pedagogy and Practice: culture and identities*, Sage, London, pp. 40-57.
- Evans, K. (2015), "Developing knowledgeable practice at work", in Elg, M., Elstrom, P-E., Klofsten, M. and Tillmar, M. (Eds.), *Sustainable development in organizations*, Edward Elgar, Cheltenham, pp. 109-126.
- Evans, K., Guile, D., Harris, J. and Allan, H. (2010), "Putting knowledge to work: a new approach", *Nurse Education Today*, Vol. 30 No. 3, pp. 245-251.
- Foley, K. and Scholten, S. (1998), *FULCO: a framework of competence for conservator-restorers in Europe*, Instituut Collectie Nederland, Amsterdam.
- Fretwell, D., Lewis, M. and Deij, A. (2001), *A framework for defining and assessing occupational and training standards in developing countries*, European Training Foundation, Turin.
- Friedman, A. (2007), *Ethical competence and professional associations*, Professional Associations Research Network, Bristol.
- Gibbs, P. (2015), "Transdisciplinarity as epistemology, ontology or principles of practical judgement", in Gibbs, P. (Ed.), *Transdisciplinary professional learning and practice*, Springer, Dordrecht, pp. 151-164.
- Gilbreth, F. and Gilbreth, L. (1917), *Applied Motion Study*, Sturgis and Walton, New York.

Gonczi, A. and Hager, P. (2010), "The competency model", in Peterson, P., Baker, E. and McGaw, B. (Eds.) *International Encyclopaedia of Education*, Elsevier, Oxford, vol. 8 pp. 403-410.

Grugulis, I. (2000), "The management NVQ: a critique of the myth of relevance", *Journal of Vocational Education and Training*, Vol. 52 No. 1, pp. 79-99.

Hager, P., Lee, A. and Reich, A. (2012), "Problematizing practice, reconceptualising learning and imagining change", in Hager, P., Lee, A. and Reich, A. (Eds.), *Practice, learning and change*, Springer, Dordrecht, pp. 1-14.

Hodkinson, P. (1995), "Professionalism and competence", in Hodkinson, P. and Issitt, M. (Eds.), *The Challenge of Competence*, Cassell, London, pp. 58-69.

Icon (Institute of Conservation). (2007), *Professional standards for conservation-restoration*. Icon, London.

Jonassen, D., Tessmer, M. and Hannum, W. (1999), *Task analysis methods for instructional design*, Lawrence Erlbaum Associates, Mahwah, NJ.

Koniotaki, A. (2017), *Competence framework for the management of a social co-operative enterprise*, EETAA, Athens (publication of the project ComProCom, www.comprocom.eu).

Lester, S. (1995), "Beyond knowledge and competence: towards a framework for professional education", *Capability*, Vol. 1 No. 3, pp. 44-52.

Lester, S. (2009), "Routes to qualified status: practices and trends among UK professional bodies", *Studies in Higher Education*, Vol. 34 No. 2, pp. 223-236.

Lester, S. (2014a), "Professional competence standards and frameworks in the UK", *Assessment and Evaluation in Higher Education*, Vol. 39 No. 1, pp. 38-52.

Lester, S. (2014b), "Professional versus occupational models of work competence", *Research in Post-compulsory Education*, Vol. 19 No. 3, pp. 276-286.

Lester, S. (2014c), "Professional standards, competence and capability", *Higher Education, Skills and Work-based Learning*, Vol. 4 No. 1, pp. 31-43.

Lester, S. (2017), *Professional competence standards: guide to concepts and development*, EETAA, Athens (publication of the project ComProCom, www.comprocom.eu).

Lester, S. and Religa, J. (2017), "'Competence' and occupational standards: observations from six European countries", *Education and Training*, Vol. 59 No. 2, pp. 201-214.

Lunt, I. (2008), "Ethical issues in professional life", in Cunningham, B. (Ed), *Exploring professionalism*, Institute of Education, London, pp. 73-98.

- Macklin, R. (2009), "Moral judgement and practical reasoning in professional practice", in Green, B. (Ed.), *Understanding and researching professional practice*, Sense, Rotterdam, pp. 83-99.
- Mansfield, B. (1989), "Competence and standards", in Burke, J. (Ed.), *Competency based education and training*, Falmer Press, Lewes, pp. 26-36.
- Mansfield, B. and Schmidt, H. (2001), *Linking VET standards and employment requirements*, European Training Foundation, Turin.
- Mitchell, L. and Mansfield, B. (1996), *Towards a competent workforce*, Gower, Aldershot.
- Reeves, R. and Knell, J. (2006), "Good work and professional work", in Craig, J. (Ed.), *Production values: futures for professionalism*, Demos, London, pp. 211-218.
- Religa, J. and Lester, S. (2016), *Models and uses of competence in six countries' VET systems*, EETAA, Athens (publication of the project ComProCom, www.comprocom.eu).
- Rittel, H. and Webber, M. (1973), "Planning problems are wicked problems", *Polity* 4: 155-169.
- Saltmarsh, S. (2009), "Researching context as a 'practiced place'", in Green, B. (Ed.), Sense, Rotterdam, pp. 153-163.
- Sandberg, J. (2000), "Understanding human competence at work: an interpretative approach", *Academy of Management Journal*, Vol. 43 No. 1, pp. 9-25.
- Sandberg, J. (2009), "Understanding of work: the basis of competence development", in Velde, C. (Ed.), *International perspectives on competence in the workplace*, Springer, Dordrecht, pp. 3-20.
- Schatzki, T. (1997), "Practices and actions: a Wittgensteinian critique of Bourdieu and Giddens", *Philosophy of the Social Sciences*, Vol. 27 No. 3, pp. 283-208.
- Schatzki, T. (2001), "Practice mind-ed orders", in Schatzki, T., Knorr Cetina, K. and von Savigny, E. (Eds.), *The practice turn in contemporary theory*, Routledge, London, pp. 43-55.
- Schön, D. (1983), *The reflective practitioner: how professionals think in action*, Basic Books, New York.
- Schön, D. (1987), *Educating the reflective practitioner*, Jossey-Bass, San Francisco.
- Sennett, R. (2008), *The Craftsman*, Allen Lane, London.
- Susskind, R. (2016), "How technology will transform the work of human experts", *Brief*, Vol. 43 No. 3, pp. 22-23.
- Taylor, F. (1911), *The principles of scientific management*, Harper, New York.

Wenger, E. (1998), *Communities of practice: learning, meaning and identity*, Cambridge University Press, Cambridge.

Willcocks, L. and Lacity, M. (2015), "Businesses will increasingly use robots to deal with the explosion of data", *LSE Business Review*, 15th September. Available from <http://eprints.lse.ac.uk/63765/>, accessed 20th June 2017.

Wolf, A. (2011), *Review of vocational education: the Wolf report*, Department for Business, Innovation and Skills and Department for Education, London.

Yorke, M. (2011), "Work-engaged learning: towards a paradigm shift in assessment", *Quality in Higher Education*, Vol. 17 No. 1, pp. 117-130.

Zheltoukhova, K. and Baczor, L. (2016), *From best to good practice HR: developing principles for the profession*, Chartered Institute of Personnel and Development, London.

Zuboff, S. (1988), *In the age of the smart machine: the future of work and power*, Basic Books, New York.