Chapter 8
Competence-based Education and Teacher Professional Development

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8.1 Introduction

The roots of competence are to be found in 'scientific management' (Taylor 1911) and what has been called 'the cult of efficiency' (Callahan 1962). At an international level, evidence for the increased emphasis by governments on teachers' instrumental effectiveness in producing prespecified and standardised outputs is demonstrated, for example, through the rise in visibility and importance of systems for measuring and comparing pupil results within and across nations in Mathematics, Science and English (PIRLS, PISA, TIMMS). At national levels, this can be seen in the increase of policies concerned with establishing national qualifications and standards for teachers at different points in their careers, tests and examinations including, in some countries, elements of 'value added' which appear to enable the measurement of pupils' progress against expectations which are established against socio-economic factors and prior attainment. Alongside this has been a further increase in 'surveillance' of teachers through, for example, performance appraisal, work scrutiny, the proliferation of target setting and external school inspection systems which place judgements of teachers' contributions to pupils' academic attainment at the centre. Schools in many countries are now able to be compared through systems of rewards and punishments. The pace and detail of governments' reform agendas are context specific but the direction of travel is the same. In short, professionalism and professional development purposes are being redefined as systems become decentralised through measures of increased organisational autonomy and made more directly accountable to government through increased systems of monitoring and evaluation in which performance itself must conform more directly to external

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rather than internal judgements of competence. However, the notion of competence has been criticised as problematic 'when either or both of two conditions are fulfilled: firstly, when competence becomes a dominant aim, so diminishing other worthwhile aims; or, secondly, when competence is construed over-narrowly' (Barnett 1994: 159).

The chapter will begin by examining, albeit briefly, a selected history of the use of the term 'competence' in the context of 'performativity', result-driven demands by governments and jurisdictions internationally for raising standards in the workplace through increased transparency, the use of more sophisticated measures of accountability and 'value for money' – what has been called the 'audit' society (Power 1997). It will then move on to consider issues of teacher professionalism in relation to the current emphasis on 'competence-based' professional development and standards.

8.2 A Short History

Although it is not possible, nor is it the purpose of this chapter, to map in detail the conceptual and developmental history of competence-based assessment in education (others have done this well, e.g. Wolf 1995, 2011), it is necessary to note its origins, forms and purposes in order to discuss its associations with and consequences for changes in the ways teachers' professionalism and their professional development are now conceived. Competence-based assessment is not new to education. For example, at least as early as 1993, competences were regarded by the British government as having 'a key role to play in building a world class workforce' (Wolf 1995: xi). It is this continuing and, in terms of the policies of many governments worldwide, ever-intensifying drive for raising standards – preferably in terms of the seductive metrics of observable and measurable results – which provides the rationale for the promotion of competences and competence-based assessment across education systems. Supported by claims of falling standards, relative to those in competitor nations, which are deemed to be incompatible with the need to increase economic competitiveness and social cohesion, successive governments have attempted to reorientate the strong liberal-humanist traditions of schooling, characterised by a belief in the intrinsic, noninstrumental value of education, towards a more functional view, characterised by competency-based, results-driven teaching (Helsby 1999: 16), payment by results and forms of indirect rule from the centre (Lawn 1996). It is also important to recognise that what has happened to education is one outcome of a larger ideological and economic pragmatism and which challenged the post-Second World War monopoly which professionals in education, health and the social services had held. For education, as for all the public services, what we are witnessing still 'is a struggle among different stakeholders over the definition of teacher professionalism and professionality for the twenty first century' (Whitty et al. 1998: 65).

Ball (2001) has described this central drive for quality and improvement as being embedded in three technologies – the market, managerialism and 'performativity' (Lyotard 1979) – and placed them in distinct contrast to the post war public welfarist state.

There are many definitions of competence-based assessment, but one that is particularly helpful is that provided many years ago by Alison Wolf:

> Competence-based assessment is a form of assessment that is derived from the specification of a set of outcomes; that so clearly states both the outcomes – general and specific – that assessors, students and interested third parties can all make reasonably objective judgements with respect to student achievement or non-achievement of these outcomes; and that certifies student progress on the basis of demonstrated achievement of these outcomes. Assessments are not tied to time served in formal educational settings… (Wolf 1995: 1)

Wolf further identified three components of competence-based assessment which are 'especially important':

1. The emphasis on outcomes – specifically, multiple outcomes, each distinctive and separately considered
2. The belief that these can and should be specified to the point where they are clear and 'transparent' – that assessors, assessees and 'third parties' should be able to understand what is being assessed, and what should be achieved.
3. The decoupling of assessment from particular institutions or learning programmes. (Wolf 1995: 2)

The notion that assessment, learning and instruction should be aligned is not new. It can be traced back to 'Taylorism' (1911) and the 'behavioural objectives' movement. This notion has been the subject of continuing criticism over the years by those whose ontological views of human agency are anchored in the idea that teaching and learning cannot and should not always be a linear, predictable process. One expression of the difference was the promotion of 'expressive' objectives and 'process models' of teaching (Eisner 1979; Stenhouse 1975) emanating from Dewey's (1933) 'ends of view' notion of learning. These kinds of objectives focus upon procedural principles of teaching which promote students' capabilities to think 'about', reflect, problem solve, imagine, understand and critique rather than developing only the functional competences necessary to meet the basic success criteria defined by the current curriculum. In short, they are used to promote qualities which are beyond those of satisfying basic education demands. The same applies to teachers. Yet, despite the measured criticisms of the narrow, atomistic, if apparently robust, learning agenda of competence-based assessment implicit in these views, all the evidence points the increased use of competences across the public services as a means of quality assuring the work of the system and the individuals within it, largely due to the increased power of managerial pressures for more transparency and contractual accountability of the workforce. Thus, 'competences' (usually though not always expressed as 'behavioural') have become part and parcel of the education landscape in many countries. They have, in the view of some, undermined teachers' traditional autonomy:

> Research has suggested that the frequent reforms in teaching…have undermined the opportunity for teachers and schools to use their discretionary competence in deciding how to plan and carry out their work, and in this way the reforms have reduced their autonomy… The attack has come from at least two sides: the introduction of new forms of management in the public sector…and the call for evidence-based practice in teaching. Research has suggested that both movements reduce teachers' autonomy though the routinization of their work, by removing the discretionary element and challenging their professional knowledge base. (Casperson 2013: 53–4)

In education systems, the consequences of the dominance of functional competence is nowhere more apparent than in the 'raw' and 'value-added' student assessments at national and international levels (OECD), teachers' performance management (aka appraisal) and external, graded school inspections. Teacher effectiveness is judged nationally and internationally against these (e.g. through the OECD and PISA reports). Moreover, student progress in pre-service (initial) teacher training is assessed in an increasing number of countries against sets of generic 'standards' (another word for competences). In the UK, this is then linked to other national sets of role performance standards (criterion-based assessment) as teachers and head teachers move through their careers. It should not be surprising, then, that much professional development work is now aligned more closely than ever with the perceived need to raise levels of students' measurable attainment in line with government targets, since their results are key indicators in judgements about the relative quality of education provided by schools. Whilst over the years, competences have been primarily associated with further and vocational education (e.g. National Vocational Qualifications), they have been seen traditionally in the workplace in general as a means of identifying and measuring skills necessary either for carrying out a job at a number of defined levels or/and as measures of the extent to which jobs are carried out successfully.

However, in the strong theoretical case for limiting the use of competency models, the fact is that: 'It is almost inevitable that the more important formal qualifications become, the more they will be expected to concur with the norms of formal fairness and transparency of rules' (Wolf 1995: 35).

This brief tour of the landscapes of competency developments has been conducted not in order to discuss their use or usefulness but rather to identify both their strengths (identification and delineation of appropriate qualities, knowledge, skills associated with expectations and standards in the workplace; provide a means of differentiation, monitoring and audit) and limitations (atomistic, potentially reductionist, oversimplified and unable always to be applied as a means for judging quality in contexts which require the possession and sustained application of complex, situation related and contingent cognitive and emotional human relating and decision-making, i.e. the teaching profession). In relation to professional development, there are difficulties, also, in measuring emotional competence which is, arguably, an essential feature of the work of teachers.

8.3 Extending the Meaning of Competence in Professional Development: A Work in Progress?

At least to the author of this chapter, critiques of both the underpinning justification for and application of competence-based education and 'training' advocates would seem to be entirely reasonable. However, they have been insufficient in themselves to stem the growth of the use of competency-based approaches in education, as levels of trust in teaching professionals in many countries have decreased and

demands for accountabilities and answerabilities at all levels have increased. Critiques have 'not so much been rebutted as disregarded, and theoretical concerns deposed in favour of supposedly more pragmatic priorities', as CBET (competence-based education and training), have 'spread into almost every area of contemporary educational discourse in the UK' (Lum 1999: 403).

In writing about competence-based teacher education, Whitty and Willmott (1991) were able to claim that 'no consensus has yet emerged about the meaning of 'competence', let alone agreement about the specific competences that should be engendered by initial teacher education or INSET (in-service education and teaching) courses' (p. 309–310). They cited the work of Hextall and his colleagues (1991) who argued that 'teaching is not reducible to a set of technical operations' (p. 15) and claim that competence-based teacher education 'encourages an over-emphasis on skills and techniques' (p. 310). They identified two 'major' approaches to the definition of competence:

– 'Competence characterised as an ability to perform a task satisfactorily, the task being clearly defined and the criteria of success being set out alongside this.
– Competence characterised as wider than this, encompassing intellectual, cognitive and attitudinal dimensions, as well as performance; in the model, neither competences nor the criteria of achievement are so readily susceptible to sharp and discrete identification' (p. 310).

Yet these major approaches are in evidence almost 30 years later, and, whilst the contexts of teacher education and teaching have changed in the intervening period, the debate continues between: (i) those who argue that to characterise teaching as being able to be reduced to a given number of discrete skills is reductionist, potentially reducing the role of teacher to that of a technician, and (ii) those who argue that it is necessary to identify such skills as public criteria for course design, teaching and assessment for quality assurance purposes. Such quality assurance, it is argued, is a necessary part of identifying a minimum or threshold standards for teacher education, teachers and classroom teaching and/or a means of identifying and judging performance expectations for teacher in different roles and levels of achieved performance for purposes of assessment and promotion.

Over the years many education systems have developed what appear to be more inclusive definitions of competence-based teacher education. One example, from Flanders, can be seen in Table 8.1 below.

These functional components and attitudes were produced for use in 1998 yet, according to Struyven and De Myst's (2010) research, more than a decade later, are 'still a work in progress' (p. 1506). When examined closely, it is perhaps unsurprising that the high ambitions contained in many items, e.g. 'teacher as innovator – the teacher as researcher', 'the teacher as culture participant', 'creative orientation', 'eagerness to learn', may not be able to be easily assessed or uniformly realised. Perhaps more importantly, there seems to be no consideration of the positive or negative influences of personal, workplace and life passage change factors on the motivation, commitment and capabilities of teachers to achieve competence. So whilst this and other similarly well-intentioned frameworks appear to take into

Table 8.1 Overview of the ten functional components and ten attitudes for (beginning) teachers in Flanders' teacher education (decree of 1998), organised by cluster of responsibility (Aelterman 1995)

Basic competences for teacher education BC = FC + (each of the) attitudes			
10 functional components for (beginning) teachers		10 attitudes	
Responsibility for the learner			
01	*The teacher as a guide of learning and development processes*	A1	*Decisiveness*
	Defining the initial situation and selecting learning goals		The teacher dares to take a stand and acts on it in a responsible manner
	Designing powerful learning environments		
	Assessment for learning and of learning		
	Meeting cultural diversity and special needs in learning		
02	*The teacher as educator*	A2	*Relational orientation*
	Providing a positive climate		In his contacts with others, the teacher is genuine, true and heartfelt
	Emancipating children		
	Meeting diversity and (special) needs in emotion and relation		
	Education in norms and values		
03	*The teacher as subject expert*	A3	*Critical reflection*
	Being knowledgeable about and skilled in a domain(s) of expertise		The teacher is prepared to question himself and the environment and verifies the value of an opinion or event, the desirability and feasibility of learning goals, before taking a stand (making decisions and acting on them)
04	*The teacher as organiser*	A4	*Eagerness to learn*
	Classroom management		The teacher actively explores situations and initiatives to broaden his professionalism
	Administrative work		
05	*The teacher as innovator – the teacher as researcher*	A5	*Organisational skills*
	Learning from experience and from collaboration with others		The teacher wants to plan, coordinate and delegate his tasks in order to efficiently attain his goals
	Reflective practitioner		
	Design research/action research/ practice-based research		
Responsibility for the school and educational community			
06	*The teacher as partner of the parents/carers*	A6	*Sense of collaboration*
	Discrete and confidential about personal information		The teacher is prepared to work at joint tasks collegially
	Communication with (diversity of) parents		

(continued)

Table 8.1 (continued)

Basic competences for teacher education BC = FC + (each of the) attitudes			
10 functional components for (beginning) teachers		10 attitudes	
07	*The teacher as member of a teaching team*	A7	*Sense of responsibility*
	Consult and work together with other team members		The teacher feels responsible for his schools and engages to enhance a positive development with learners
	Discussing (own) approaches to teaching with colleagues		
08	*The teacher as part of external parties*	A8	*Creative orientation*
	Communicate and work together with parties that offer education-related support (e.g. to students or teachers)		The teacher should be creative and innovative in dealing with situations
09	*The teacher as member of the educational community*	A9	*Flexibility*
	Participation in debate on teaching and education		The teacher easily adapts to changing circumstances
Responsibility for society			
10	*The teacher as culture participant*	A10	*Orientation towards a correct and appropriate use of language and communication*
	Perception of and critical approach towards topical matters in different domains: political, economic, philosophical, esthetical, scientific and cultural		The teacher uses language correctly, appropriately, adaptively and respectfully dependent on the receiver and situation

account the complexities of teaching and teachers' lives, the ways in which they are constructed for use limits and may even distort the quality of the judgements which are made. In short, competency-based measures of assessment, when applied to the complex lives of professionals, do not always measure what they should in settings where 'know-how' and 'knowing why' are as important as 'knowing what'. As yet, then, it remains the case that:

> the capacity of CBET to substantially achieve its ends, given that competence is conceived in such comprehensive terms, is an entirely contingent matter and one which remains to be demonstrated [i.e. there is no necessary correspondence between competence as an aim and the so-called 'competencies' which constitute CBET's modus operandi]. (Lum 1999: 407)

8.4 Standards: Competences Re-named?

Perhaps the most significant development and application of competences to teachers and teaching has been their reconfiguration in what seems to be the more benign form of 'standards'. The development and use of specified 'standards' in assessing the performance of professions may be seen as an acknowledgement of the

complexity of their work and a tacit recognition that simple metrics are not adequate. For example, teacher standards in England are divided into 8 parts, each with a number of subsections (DfE 2013). Teachers are expected to:

1. Set high expectations which inspire, motivate and challenge pupils
2. Promote good progress and outcomes by pupils
3. Demonstrate good subject and curriculum knowledge
4. Plan and teach well-structured lessons
5. Adapt teaching to respond to the strengths and needs of all pupils
6. Make accurate and productive use of assessment
7. Manage behaviour effectively to ensure a good and safe learning environment
8. Fulfil wider professional responsibilities

Meeting and exceeding these standards is a central part of annual appraisal and contributes internally to career advancement and externally to judgements made about the quality of teaching and learning. The question in this chapter, however, is the extent to which they are matched by the professional development opportunities provided and to what extent they meet the claim that competence-based education is creating opportunities for students and workers: 'Competence-based education is creating opportunities for students and workers, close to their world of experience in a meaningful learning environment (preferable the professional practice) wherein the learner can develop integrated, performance-oriented capabilities to handle the problems in practice' (Wesselink et al. 2003: 3–5).

In one sense, the presence of professional standards and qualifications may be seen as an addition to the status of teaching as an occupation – not everyone can gain entrance or progress equally along a defined career trajectory and those who do must demonstrate that they can meet sets of nationally defined 'fit for purpose' criteria. Superficially, they act as 'quality-assured' mechanisms for ensuring that their students in school will receive at least 'competent' and perhaps, also, 'good' or 'outstanding' teaching by skilled practitioners. In this sense, also, 'competence-based' assessment seems to fit with professional development opportunities which have been put into place by governments in the ongoing development of 'self-improving' school systems.

8.5 Capability: An Alternative to Competence?

Essentially, the debate about the purpose, efficacy and practical value of competence-based approaches in the education sphere is a debate both among educationists (the philosophical dimension) about the nature of human capability, whether and how such human capabilities may be represented and between educationalists and politicians (the political dimension). For example, if we were to agree with Polanyi's (1983) view that much of human knowledge is 'implicit' as 'We can know more than we can tell' (p. 4) or that of Schön (1996) that 'Often, we cannot say what it is that we know' (p. 49), and then we might also agree with Halliday (1996, p. 54 cited

in Lum 1999, p. 411) that 'written descriptions of behaviour may be seen as substitutes for the elusive notion of objective reality' (p. 54). This would be countered to the claim of so-called empiricist assumptions that features of human capabilities can be identified and assessed through collections of competences (whether behaviour or otherwise) that are 'ontologically objective'. The proponents of the former would, to the contrary, claim that reality is socially constructed and ontologically subjective and that the understanding and judgement of 'competences' are entirely dependent upon human agreement. For example, Lum (1999) concludes his paper on 'Where's the competence in competence-based Education and Training?' with 'two fundamental assumptions between which the competence strategist can be seen to vacillate' (p. 413): 'i. The assumption that human capabilities are intrinsic, ontologically objective features of the world; ii. The assumption that it is possible for statements to unequivocally, accurately and sufficiently describe ontologically subjective/epistemologically objectively features of the world' (ibid. pp.413–4).

Amartya Sen (1985) posits a contrasting view of human development to the proponents of competences. Sen's work is primarily intended as both a critique of utilitarianism and inequality, arguing that individuals are the 'primary objects of moral concern' (Brighouse and Swift 2003: 358).

Sen's work is relevant to education, not least because it focuses attention on achievements in terms of the teacher as a person as well as a functionary. 'A person's capability refers to the alternative combinations of functionings that are feasible for her to achieve. Capability is thus a kind of freedom: the substantive freedom to achieve alternative functioning combinations' (Sen 1999: 75).

Whilst competences seem to be more inclusive than earlier behaviourist definitions, in contrast to Amartya Sen's conceptualisation of 'human capability', they are defined by those who advocate competences essentially in functionalist terms. They are 'clusters of knowledge structures and also cognitive, interactive, affective and… attitudes and values, which are conditional for carrying out tasks, solving problems and effectively functioning in a certain profession, organisation, position and role' (Wesselink et al. 2003: 3–5). A distinctive feature of Sen's 'human capability' approach is that it focuses upon, 'the *state* of the person, distinguishing it both from the *commodities* that help generate that state, and from the *utilities* generated by the state' (Sen 1993: 43). In terms of teachers and teaching, whether in schools, further education or higher education, this is important, for the ability to stimulate, motivate, engage and interact is key factor in influencing students' learning and achievement.

If a key purpose of school education is to enrich the lives of students (Flores-Crespo 2004: 45) by, for example, promoting critical reflection and active engagement in their own learning and, through these, the ability to exercise personal autonomy rather than passive compliance, then fostering 'capability' in teachers also, rather than 'functionalism' only, becomes important. Education then becomes the 'practice of freedom':

> Education as the practice of freedom – as opposed to education as the practice of domination – denies that man is abstract, isolated, independent, and unattached to the world; it also denies that the world exists as a reality apart from people. Authentic reflection considers neither abstract man nor the world without people, but people in their relations with the world. (Freire 1972: 62)

The notion of 'capability', then, may be seen as expanding the possibilities for teachers and, by association, students to be 'responsible agents who can alter their destiny' (Flores-Crespo 2004: 49). Sen's work draws attention to the purposes of education as both 'a form of functioning or well-being achievement, for example, completing…basic education in a school'…[and]…as part of a process of exercising agency, that is, using reflection, information, understanding, and the recognition of one's right to exercise these capacities'(Flores-Crespo 2004: 49).

8.6 Professionalism and Professional Development: Functionality or Capability?

It is widely acknowledged that, 'the quality of education depends to a large extent on the quality of teaching staff, which in turn depends on their participation in CPD activities, at least partly'(Seezink and Poell 2010: 471). Participation in lifelong learning has long been associated with the meanings of professionalism, the subject of many studies over the last century. Adopting a macro perspective, Andy Hargreaves has presented the development of professionalism as passing through four historical ages in many countries – the 'pre-professional' (managerially demanding but technically simple in terms of pedagogy), the 'autonomous' (marked by a challenge to the uniform view of pedagogy, teacher individualism in and wide areas for discretionary decision-taking), 'collegial' (the building of strong collaborative cultures alongside role expansion, diffusion and intensification) and the 'post-professional' (where teachers struggle to counter centralised curricula, testing regimes and external surveillance and the economic imperatives of marketisation) (Hargreaves 2000: 153). Essentially, his work and that of other researchers (Helsby 1996; Robertson 1996; Talbert and McLaughlin 1996) illustrate the growth of challenges from governments to teachers' agency and a contestation of control of curriculum content, pedagogy and assessment historically associated with teacher professionalism.

Yet, 'being a professional' is still seen as an expectation placed upon teachers, which distinguishes them from other groups of workers. Professionalism in this sense has been associated with having a strong technical culture (knowledge base), service ethic (commitment to serving clients' needs), professional commitment (strong individual and collective identities) and professional autonomy (control over classroom practice) (Etzioni 1969; Larson 1977; Talbert and McLaughlin 1996). As we have seen, however, the emphasis on corporate management which many reforms produce has resulted in a sea change in how professionals are identified and judged. Each teacher must now be a:

> professional who clearly meets corporate goals, set elsewhere, manages a range of students well and documents their achievements and problems for public accountability purposes. The criteria of the successful professional in this corporate model is one who works efficiently and effectively in meeting the standardised criteria set for the accomplishment of both students and teachers, as well as contributing to the school's formal accountability processes. (Brennan 1996: 22)

So the issue is not whether competence-based development itself is an intrinsically valuable and worthwhile pursuit but whether its dominance distorts and detracts from the notion of teacher professionalism and the improved practices of teachers and teaching. Teachers' pre-service and in-service professional development programmes have, perhaps not surprisingly, become increasingly associated with the need to 'perform' at individual and whole-school levels through compliance with the main strands of the new public management agenda, and it has been argued by some that much less attention is now being given to teachers' broader commitment and emotional and motivational needs. A key question in this chapter, therefore, is what are the professional responsibilities of individual teachers and schools and how may these be best sustained over the course of their careers in contexts in which accountability and performativity imperatives dominate. It may be that, as Cohn and Kottkamp observed:

> Power and authority….is being taken away from the teacher. Now, everything is mandated to you. You have no freedom to venture out; you want to be creative with the kids, and you want to do things. You don't want to be so routinized….But you're accountable for so much, so many things. (Cohn and Kottkamp 1993:140)

In presenting an alternative and more agential view of teachers, Sachs (2003) identified two contrasting forms of professional identity:

- Entrepreneurial, which she identifies with efficient, responsible, accountable teachers who demonstrate compliance to externally imposed policy imperatives with consistently high-quality teaching as measured by externally set performance indicators. This identity may be characterised as being individualistic, competitive, controlling and regulative, externally defined, standards led.
- Activist, which she sees as driven by a belief in the importance of mobilising teachers in the best interests of student learning and improving the conditions in which this can occur. In this identity, teachers will be primarily concerned with creating and putting into place standards and processes which give students democratic experiences.

The former, she argued, is the desired product of the performativity, managerialist agendas, whilst the latter suggests inquiry-oriented, collaborative classrooms and schools in which teaching is related to broad societal ideals and values and in which the purposes of teaching and learning transcend the narrow instrumentalism of current reform agendas.

We can apply these different understandings of professionalism to the design and practices and content of teachers' continuing professional development. There, we might expect to see approaches which include a focus upon functionalities but also upon the central human capabilities which, according to Nussbaum (2000), need to be present for a 'fully human good life' (Walker and Unterhalter 2007: 13): bodily health; bodily integrity; senses; imagination and thought; emotions; practical reason; affiliation; other species; play; and control over one's environment (Nussbaum 2000: 78–80), for it may be argued that these are the capabilities which teachers need in order to be able to be at their most effective in the classroom. As emphasised by the European Commission (2012: 8–9):

> Teaching competencies are thus complex combinations of knowledge, understanding, values and attitudes, leading to effective action in situations […] The range and complexity of competencies required for teaching in actual societies is so great that any one individual is unlikely to have them all, nor to have developed them all to the same high degree […] Teachers' continuous professional development is, thus, highly relevant both for improving educational performance and effectiveness and for enhancing teachers' commitment. (European Commission 2012: 8–9)

Although, as reported in TALIS (2013: 99), 'empirical evidence increasingly shows the positive impact of teachers' professional development on students' scores (Hill 2013; Yoon et al. 2007), measurements of enhanced teachers' commitment competence, identified as a key factor in teachers' perceived ability to teach to their best (Day et al. 2007), are elusive. Indeed, the types of professional development identified as most common in TALIS (2013: 108) are principally instrumental in their orientation: (i) knowledge and understanding of subject fields, (ii) pedagogical competence in the teaching subject field, (iii) student evaluation and assessment practices, (iv) knowledge of the curriculum, (v) ICT skills for teaching, (vi) student behaviour and classroom management, (vii) approaches to individual learning, (viii) new technologies in the workplace, (ix) teaching cross-curricular skills (e.g. problem-solving, learning to learn), (x) teaching students with special needs, (xi) student career guidance and counselling, (xii) approaches to developing cross occupational competences for further work and studies, (xiii) school management and administration, and (xiv) teaching in a multicultural or multilingual setting. It is noticeable that the methodology employed by OECD in the TALIS (2013) study did not include questions regarding, for example, commitment, resilience, motivation or reflection.

A key problem with traditional representations of competency approaches is that of the tendency towards allowing 'functionings' to dominate because they appear to be observable skills and behaviours which can be most readily used by employers and prospective employers as 'baseline data' which can then be used to assess job demands, inform judgments about individual performance levels and their relative performance against others, i.e. the achieved outcomes of individuals in relation to their work roles which are defined by employer-defined work demands related to observable products. Despite the inclusion in many competence-based instruments of 'softer' values, attitudes and qualities in, for example, teaching 'standards', these are much less easy to quantify and so, in this sense, less reliable as indicators of quality. We should remember that not everything that can be measured is valuable and that much of what is valuable, especially in the 'human-related' professions, is difficult to quantify.

8.7 Conclusions

There is nothing wrong with identifying and even atomising particular 'role' and 'job' competences, or indeed defining and refining the means by which they might be assessed, provided always that there is a recognition that (i) atomisation of

knowledge and skills does not lend itself to the requirement to teach well and that (ii) professional development programmes need to define clearly whether they are for the primary purpose of *training*, e.g. through coaching particular skills; *development*, e.g. through critical appraisal of aspects of teaching and learning; or *renewal*, e.g. with a focus upon capacity building for commitment and resilience. Brundrett and Silcock (2002) summarised this well in their wide-ranging review of competences in education, concluding that:

> Despite all this revisionism and continuing optimism expressed by supporters, the worm eating away the core of the competence approach is that it unashamedly offers *training* rather than *education* whereas training endeavours to impart knowledge, skills and attitudes necessary to perform job-related tasks and to improve job performance in a direct way, education is a process whose prime purposes are to impart knowledge and develop cognitive abilities applicable to all important life-situations. In this sense, education is not primarily concerned with job performance, it is concerned with the deployment of more subtle and flexible human capabilities for dealing with fleeting problems, seldom vulnerable to trained skills…specifically, teachers need broad intellectual abilities to solve the most severe problems currently facing schools. (Brundrett and Silcock 2002: 107–108)

Judyth Sachs's (2011) metaphors of continuing professional development are particularly useful in purposeful planning.

1. *CPD as retooling*. This is seen as the dominant training model, based upon a 'practical' competency view of teaching in which ideas, knowledge and techniques learned can be immediately applied to the classroom. It represents 'a skill-based, technocratic view of teaching' (Kennedy 2005: 237) and 'is likely to promote a limited conception of teaching and being a teacher' (Day 1999: 139).
2. *CPD as remodelling*. This is seen by Sachs as being 'more concerned with modifying existing practices to ensure that teachers are compliant with government change agendas…[it]…reinforces the idea of the teacher as the uncritical consumer of knowledge and operating at the level of improving specific skills as these relate to immediate classroom practice' (2011: 5).
3. *CPD as revitalising*. Here the focus is upon teacher renewal, providing opportunities for teachers to reflect upon why they came into teaching in the first place, and examining beliefs and practices, perhaps through professional development networks, or participation in practice-based enquiries.
4. *CPD as reimagining.* This represents what Sachs calls 'a transformative view of teacher professionalism' (2011: 7) which acknowledges the complexities of being a teacher. It seeks to develop in teachers their own 'critical and transformative capacities' (2011: 7). Here, teachers may participate in collaborative activities in collegial environments which 'support open minded inquiry, reflection… they support teachers in validating their knowledge and building on it' (2011: 8).

The first two are oriented towards 'training', the third and fourth towards teacher learning. Experience and research, then, suggest that the emphasis on behaviourally focussed competency-based models of the work of teaching does not represent well their work but at worst ignores and at best under values the reality of their work. Rather, teachers at their best combine their professional craft expertise with their

personal commitment, care, experience, passion, emotional understandings and values in their work; and the possession and deployment of these are difficult to measure.

If we look a little further at the research literature which examines the nature of teaching and learning, we see a different picture which may cause us to question the implicit definition of teaching and learning in classrooms and the nature of professionalism provided in the competences' section above and perhaps there is a glimmer of light to be seen in the report of the New Commission on the Skills of the American Workforce (2001) reported that:

> We need to bring what we teach and how we teach into the 21st century. Right now we're aiming too low. Competency in reading and math – the focus of so much 'No Child Left Behind' testing – is the meagre minimum. Scientific and technical skills are, likewise, utterly necessary but insufficient. Today's economy demands not only a high-level competence in the traditional academic disciplines but also what might be called 21st century skills. (Wallis and Steptoe 2006: 51)

As long ago as 1987, Lee Shulman described teaching as, 'The exercise of judgement under conditions of unavoidable uncertainty' (1998: 9); however, Shulman did not then differentiate between 'teaching' as craft and 'good' teaching as 'artistry' in addition to 'craft'. Eisner, alongside many other scholars, claimed that good teaching depends not only on knowledge and skills but also upon intuition, aesthetic considerations and pedagogical tact and that the exercise of these requires a synthesis of imagination, intellect and emotion:

> Artistry does not reduce complexity, it has a tendency to increase complexity by recognising subtlety and emphasising individuality. It does not search for the one best method. It puts a premium on productive idiosyncrasy. It is crucial complement to getting it down to a science. In the vernacular, 'getting it down to a science' means, ideally, getting it down to an errorless procedure. A procedure becomes errorless when there are no surprises. When there are no surprises there is no problem. When there is no problem, there is neither challenge nor growth. Artistry is teaching as a pervasive concept goes beyond routine, invites risk, courts challenges and fosters growth. (Eisner 1996: 18)

Much later, in his much acclaimed meta-analysis relating to the influences in student achievement, John Hattie (2009) made a similar observation. Referring to 'passion' rather than 'artistry', he writes:

> We rarely talk about passion in education, as if doing so makes the work of teachers seem less serious, more emotional than cognitive, somewhat biased or of lesser importance…The key components of passion for the teacher for the learner appear to be the sheer thrill of being a learner or teacher, the absorption that that accompanies the process of teaching and learning, the sensations of being involved in the activity of teaching and learning, and the willingness to be involved in deliberate practice to attain understanding…it infuses many of the influences that make a difference to the outcomes. It requires more than content knowledge, acts of skills teaching, or engaged students to make the difference.

In a changing world, basic sets of competences acquired in the pre-service 'training for work' context will be insufficient to building and sustaining quality in teaching. Teaching itself is more than a scientific or technical occupation. To teach well requires 'professional capital'. This is an amalgam of 'human, social and decisional'

capital (Hargreaves and Fullan 2012: 3). It represents the capability and capacity to apply fit for purpose, timely, social, decisional and personal capital which contain both educational values, intellectual and emotional understandings. In considering the limitations of relying upon the identification and teaching of competences defined as skills, their definition of 'decisional capital' is especially appropriate: 'the capital that professionals acquire and accumulate through structured and unstructured experience, practice and reflection – capital that enables them to make wise judgements in circumstances where there is no fixed rule or piece of incontrovertible evidence to guide them' (Hargreaves and Fullan 2012: 93–4).

One way of defining 'wise' in relation to 'discretionary capital' is to consider the complexity of decision-making processes by 'experts' in the classroom. Research by Eraut et al. (2000) identified five elements of workplace decision-making:

- Experts frequently generate and evaluate a single option rather than multiple options.
- Experts are distinguished from novices mainly by their situational assessment abilities, not their general reasoning skills.
- Because most naturalistic decision problems are ill structured, decision-makers choose an option that is good enough, though not necessarily the best.
- Reasoning and acting are interleaved, rather than segregated.

> Instead of analysing all facets of a situation, making a decision and then acting, it appears that in complex realistic situations people think a little, act a little and then evaluate the outcomes and think and act some more. (Eraut et al. 2000: 5)

Paradoxically, measures of 'accountability' for the quality of teachers' work have become more narrowly focussed and transparent, so too has the emphasis upon more personalised, deeper learning opportunities for students. So, with the recognition that teaching itself is ever more complex have come new understandings across many systems of education that a competency-based systems of professional development must provide opportunities for teachers themselves to engage in deeper learning which includes but goes beyond the use of strong data systems and knowledge of external requirements related to standards. Moreover, whilst it is important to acknowledge that different qualities and competences might be usefully defined in relation to career progression, it is equally important to recognise that, as with students, so teacher motivation, commitment and resilience may fluctuate within and across different professional life phase (Day et al. 2007), as will teachers' sense of professional identity: and with these the capacity not only to teach well but also to their best.

So we learn from this that teaching is more than the sum of competences; however, these may be defined and that professional development opportunities and activities should reflect this. Narrowly defined competences are only one part of the necessary toolkit which teachers need in order to teach to their best. In order to exercise 'discretionary capital' (Hargreaves and Fullan 2012) they need, as Eisner, Hattie, Hargreaves, Shulman and many other reputable researchers down the years have noted, to be able to 'read' and understand the classroom, school, pupil and

policy contexts in which they work, to exercise 'wise' judgements. They need, also, to be motivated and committed (to their subjects, to their students, to their colleagues), and they need to have capacities for hope, academic optimism and resilience which encompass but go beyond narrowly defined competences.

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