



Supporting teacher competence development

for better learning outcomes

This text draws on the work of the Thematic Working Group 'Teacher Professional Development' which comprised experts nominated by 26 European countries, and stakeholder organisations. More information can be found at: http://ec.europa.eu/education/school-education/teacher-cluster_en.htm. Section one draws heavily on background research and reviews of literature undertaken by the Commission's consultant, Dra. Francesca Caena.

July 2013

Table of Contents

0	Introduction	5
1	Teacher Competences: why are they important?	7
	Teacher quality is high on the agenda	7
	What is a competence?	9
	Competence and professionalism	11
	Teacher expertise and the development of competences	14
	Competences and professional standards	15
2	The value of frameworks of teacher competences	17
	Why define teachers' competences?	17
	Added value	18
3	Defining teacher competences: the current situation	19
	Defining teacher competences: examples from around Europe	19
	Using teacher competence frameworks: examples from around Europe	22
	Policy implications	23
4	Developing and implementing frameworks of teacher competences....	25
	The importance of the conceptual framework	25
	Ownership	26
	Purpose	27
	The process of defining teacher competences	27
	Key features of a framework	28
	Putting teacher competences into words	30
	Implementation	30
5	Helping teachers to acquire and develop professional competences throughout their careers.....	33
	Developing teacher competences: the current situation in Europe	33
	Supporting teachers' professional learning	34
	Stimulating teachers' engagement in professional learning and competence development	35
	Assessing the development of teachers' competences	36
	Providing the right opportunities for professional learning	38
	Conditions for policy success	40
6	Conclusions	43
	Annex 1 aspects of competence.....	45
	Annex 2 References	47
	Annex 3 Policy examples	53
	1. Belgium (Flanders).....	53
	2. Ireland	54
	3. The Netherlands	56
	4. Estonia	58
	5. Sweden	59

0 Introduction

- 1 Making sure that Europe's six million teachers have the essential competences they require in order to be effective in the classroom is one of the keys to raising levels of pupil attainment; encouraging teachers to continue developing and extending their competences is vital in a fast-changing world.
- 2 Further, as noted in the European Commission's communication 'Rethinking Education' (2012), the reform of education and training systems is essential to achieving higher productivity and the supply of highly skilled workers. In this context, it invited Member States to:

"revise and strengthen the professional profile of all teaching professions [by] reviewing the effectiveness as well as the academic and pedagogical quality of Initial Teacher Education, introducing coherent and adequately resourced systems for recruitment, selection, induction and professional development of teaching staff based on clearly defined competences needed at each stage of a teaching career, and increasing teacher digital competence". (European Commission 2012a)
- 3 Such reforms need to be founded upon a shared agreement in each education system about what it takes to be a high quality teacher: what competences (knowledge, skills and attitudes) they need, how these can be understood, described and deployed – and what policies and practical provisions can support teachers to acquire and develop them throughout their careers.
- 4 The Commission's document "Supporting the Teaching Professions' (European Commission 2012c) notes that a lack of clarity about what society can expect from its teaching staff can make it more difficult for Member States to ensure that the same high standards of teaching apply in all schools; it can hinder sound decisions about expenditure on staffing, including recruitment, selection and human resource development. This can also have a negative impact on the status and development of the profession. While many professions are built around consensus about general standards, as well as specific practices, in teaching such common ground is too often lacking; in most professions, new knowledge is accommodated by periodically revising practice guidelines – which is not generally the case in teaching.
- 5 Therefore, Member States increasingly acknowledge the need to define clearly what teaching staff are expected to know, and be able to do; such frameworks of teacher competences can then be the basis for:
 - defining the learning outcomes of initial teacher education programmes,
 - defining criteria for recruitment and selection to teaching posts,
 - assessing teachers' needs for in-service training , and
 - arranging the provision of professional learning opportunities so that teachers continue to develop their competences throughout their whole careers.
- 6 The guidance and advice expressed in the following pages stem from a process of 'peer learning' between experts on teacher education nominated by 26

countries and by European stakeholder bodies. Peer learning enables participants to compare and contrast different policy approaches, learn from other countries' practices, reflect critically on current arrangements in their own countries and draw shared conclusions about what makes for effective policies.

- 7 This document offers policymakers practical and reasonable advice that is underpinned by evidence from academic research and from the analysis of current policies in participating countries. It identifies key characteristics of successful policies and give practical examples. Recognising that every education system is unique, it does not make prescriptions about specific policy reforms, but provides a menu from which appropriate policy responses can be chosen and tailored to fit each national context. Specifically, it:
- explains what we mean by teacher competences [► Chapter 1 / Annex 1]
 - explains why a focus on teacher competences is important for improving pupil attainment [► Chapter 1]
 - explains the connections between competences and standards [► Chapter 1]
 - discusses the benefits of frameworks of teacher competences [► Chapter 2]
 - gives examples of the policy approaches to teacher competences currently in use in Europe [► Chapter 3 / Annex 3]
 - explains how to develop and implement teacher competence frameworks [► Chapter 4]
 - shows how systems can encourage teachers to further develop their competences [► Chapter 5]
 - discusses ways of assessing the development of teachers' competences [► Chapter 5]
 - discusses the provision of learning opportunities for teachers [► Chapter 5]
 - defines the key factors that lie behind successful policies, [► Chapter 5]
 - and gives key background references and policy examples [► Annexes]

1 Teacher Competences: why are they important?

This chapter:

- Explains the importance of teacher competences for the achievement of educational policy goals;
- Describes the complex and ever-evolving features of the competences that all teachers require to be effective;
- Reviews latest research in this field;
- Outlines the relationships between competences and standards;
- Looks at how teacher expertise develops over time; and
- Explains why action is needed now.

Teacher quality is high on the agenda

- 8 The roles of teachers and schools are changing, and so are expectations about them: teachers are asked to teach in increasingly multicultural classrooms, integrate students with special needs, use ICT for teaching effectively, engage in evaluation and accountability processes, and involve parents in schools (OECD, 2009). Furthermore, a recent World Summit on Teaching noted that teachers need to help students acquire not only “the skills that are easiest to teach and easiest to test” but more importantly, ways of thinking (creativity, critical thinking, problem-solving, decision-making and learning); ways of working (communication and collaboration); tools for working (including information and communications technologies); and skills around citizenship, life and career and personal and social responsibility for success in modern democracies” (OECD 2011).
- 9 When many teachers undertook their initial education, knowledge about learning and teaching was less developed, many teaching tools were not available and the role of education and training was more narrowly conceived. For example, the increased availability of educational resources via the worldwide web, including Open Educational Resources, means that both teaching staff and learners have, potentially, a much wider range of learning materials at their disposal and teachers will increasingly need the competences to find, evaluate and deploy learning materials from a wider range of sources, and to help learners acquire these competences (European Commission 2012c).
- 10 So teaching staff nowadays also need the competences to constantly innovate and adapt; this includes having critical, evidence-based attitudes, enabling them to respond to students’ outcomes, new evidence from inside and outside the classroom, and professional dialogue, in order to adapt their own practices.
- 11 The ETUCE describes quality teachers as equipped with the ability to integrate knowledge, handle complexity, and adapt to the needs of individual learners as well as groups. Teacher competences are built on 'a concept of teaching as praxis in which theory, practice and the ability to reflect critically on one’s own

and others' practice illuminate each other, rather than on a concept of teaching as the acquisition of technical skills' (ETUCE, 2008).

- 12 Teaching competences are thus complex combinations of knowledge, skills, understanding, values and attitudes, leading to effective action in situation. Since teaching is much more than a task, and involves values or assumptions concerning education, learning and society, the concept of teacher competences may resonate differently in different national contexts.
- 13 The range and complexity of competences required for teaching in the 21st century is so great that any one individual is unlikely to have them all, nor to have developed them all to the same high degree. Attention must therefore be focused also on the competences or attributes of an education system or of a teaching team.
- 14 The question of teachers' competences needs to be set in the wider context of the European Union's work to ensure that all citizens have the competences (knowledge, skills and attitudes) they require. The European Parliament and the European Council in 2006 adopted a Recommendation on Key Competences for Lifelong Learning; among the eight key competences, the importance of transversal competences (digital, learning to learn, civic competences) stands out - in particular, the meta-competence of learning to learn (adjusting to change, managing and selecting from huge information flows) (European Union 2006). Teachers should understand, deploy and assess key competences; this entails interdisciplinary collaboration skills, as underlined in the document Assessment of Key Competences in initial education and training (European Commission, 2012); teachers should model these Key Competences as well as helping learners to acquire them.
- 15 Ministers of Education, meeting in the Education Council, have on three occasions (European Union 2007, 2008, 2009) committed themselves to improving the whole continuum of teacher education: the recruitment and selection of teachers, the quality of initial teacher education, the systematic support to beginning teachers, the relevance and quality of career-long opportunities for professional development.
- 16 Concerning the competences of teachers, Ministers have recognised that:
The knowledge, skills and commitment of teachers, as well as the quality of school leadership, are the most important factors in achieving high quality educational outcomes. ... For this reason, it is essential ... to ensure that those recruited to teaching and school leadership posts are of the highest calibre and well-suited to the tasks they have to fulfilgreat care and attention should ... be devoted to defining the required profile of prospective teachers and school leaders, to selecting them and preparing them to fulfil their tasks. (European Union, 2009)
- 17 Although Ministers have not adopted a complete list of the competences teachers require, they have agreed that, as a minimum, teachers should have a specialist knowledge of the subject(s) they teach, plus the necessary pedagogical skills to teach them, including teaching to heterogeneous classes, making effective use of ICT, and helping pupils to acquire transversal competences. Ministers have also

noted specifically the need to promote certain key professional values and attitudes amongst teachers: reflective practice, autonomous learning, engagement in research and innovation, collaboration with colleagues and parents, and an involvement in the development of the whole school.

- 18 Likewise, the document *Supporting the Teaching Professions for better learning outcomes* (European Commission, 2012c) noted that teaching staff 'will increasingly need the competences to find, evaluate and deploy learning materials from a wider range of sources', as well as 'critical, evidence based attitudes, enabling them to respond to students' outcomes, new evidence from inside and outside the classroom, and professional dialogue, in order to adapt their own practices'.
- 19 There is general agreement that, for teachers, the acquisition and development of competences needs to be viewed as a career-long endeavour. Ministers of Education have recognised that:

No course of initial teacher education, however excellent, can equip teachers with all the competences they will require during their careers. Demands on the teaching profession are evolving rapidly, imposing the need for new approaches.

To be fully effective in teaching, and capable of adjusting to the evolving needs of learners in a world of rapid social, cultural, economic and technological change, teachers themselves need to reflect on their own learning requirements in the context of their particular school environment, and to take greater responsibility for their own lifelong learning as a means of updating and developing their own knowledge and skills. (European Union, 2009)

- 20 Teachers' continuous professional development is highly relevant both for improving educational performance and effectiveness, and for enhancing teachers' commitment, identity and job satisfaction. Although they are interconnected with the features and constraints of specific school contexts and national education systems (OECD, 2009), teachers' competences have powerful effects on student achievement: up to three quarters of school effects on student outcomes can be explained by teacher effects (Rivkin, Hanushek & Kain, 2005).

What is a competence?

- 21 A competence is best described as 'a complex combination of knowledge, skills, understanding, values, attitudes and desire which lead to effective, embodied human action in the world, in a particular domain' (Deakin Crick, 2008). *Competence* is therefore distinguished from *skill*, which is defined as the ability to perform complex acts with ease, precision and adaptability.
- 22 Teaching is, of course, much more than a 'task'. As Conway and colleagues (2009) point out, discussions about the competences needed by teachers, how they develop over time, and how they are evidenced and recorded, are bound up with wider discussions about:
- assumptions about learning;
 - the purposes of education;

- society's expectations of, and demands on, the teacher;
 - available resources, priorities and political will;
 - the status of the profession;
 - perceived external or international pressures;
 - existing traditions and culture;
 - the broader societal context and environment in which teaching and teacher education occur.
- 23 The concept of competence, in teaching, thus encompasses the following features:
- it involves tacit and explicit knowledge, cognitive and practical skills, as well as dispositions (motivation, beliefs, value orientations and emotions) (Rychen & Salganik, 2003);
 - it enables teachers to meet complex demands, by mobilising psycho-social resources in context, deploying them in a coherent way;
 - it empowers the teacher to act professionally and appropriately in a situation (Koster & Dengerink, 2008);
 - it helps ensure teachers' undertaking of tasks *effectively* (achieving the desired outcome) and *efficiently* (optimizing resources and efforts);
 - it can be demonstrated to a certain level of achievement along a continuum (González & Wagenaar, 2005).
- 24 It is also useful to distinguish between *teaching* competences and *teacher* competences (OECD, 2009). *Teaching* competences are focused on the role of the teacher in the classroom, directly linked with the 'craft' of teaching - with professional knowledge and skills mobilised for action (Hagger & McIntyre, 2006). *Teacher* competences imply a wider, systemic view of teacher professionalism, on multiple levels - the individual, the school, the local community, professional networks.
- 25 Although dispositions are fundamental for both competence sets, they play a decisive role for teacher competences, embracing attitudes to constant professional development, innovation and collaboration. Descriptions of the two sets of competences overlap and interweave, as they often do in theory and practice, since they are concerned with the professional lives and experiences of teachers.
- 26 The following aspects recur in the research (Feiman-Nemser, 2001; Williamson McDiarmid & Clevenger-Bright, 2008), generally broken down as *knowledge, skills and attitudes*.
- Teachers need a deep knowledge of how to teach their specific subject (Pedagogical Content Knowledge/PCK) (Krauss et al., 2008; Shulman, 1987), for effective practice in diverse, multicultural, inclusive learning environments (Williamson McDiarmid & Clevenger-Bright, 2008); pedagogical content knowledge (PCK) is connected with students' learning (Hill et al., 2005).
 - Teaching needs to be both effective (successful in producing learning) and good (morally and rationally sound) (Fenstermacher & Richardson, 2005).

- Because teaching is characterised by uncertainty, teachers require 'adaptive expertise': the ability to adapt their plans and practices to meet students' learning needs (Hatano & Oura, 2003; Vogt & Rogalla, 2009).
- Whatever their level of competences, teachers' actions and effectiveness are bounded by the social, cultural, institutional opportunities and constraints of their professional settings (Putnam & Borko, 2000).
- The act of teaching implies mediation with stakeholders about contents and methods, practices and choices in the classroom – negotiating skills are therefore crucial.
- There is an increasing recognition of the benefits of teachers themselves generating new knowledge about teaching, in schools seen as communities of practice and inquiry (Cochran-Smith & Lytle, 1993, 2009; Hagger & McIntyre, 2006).
- Reflective, interpersonal skills for learning in professional communities are important, together with research skills.
- Teachers need to have critical, evidence-based attitudes to their own practices, grounded in input from different sources – students' outcomes, theory and professional dialogue – in order to engage in innovation (Lave & Wenger, 1991; McLaughlin & Talbert, 2001; Wenger, 1998).

Competence and professionalism

- 27 Conceptualisations of teacher competences are linked with visions of professionalism, theories of teaching and learning, quality cultures and socio-cultural perspectives – with tensions between diverse approaches. The differences between theoretical traditions about teaching in (for example) the English-speaking and German-speaking worlds can offer valuable opportunities for dialogue and integration.
- 28 Insights into relevant features of teacher competences can be found in international studies, projects (Kelly & Grenfell, 2004; González & Wagenaar, 2005; ¹ OECD, 2009)² and literature (Feiman-Nemser, 2008; Williamson McDiarmid and Clevenger-Bright, 2008), concerned with teacher education, cognition and teacher effectiveness.
- 29 An overview of key aspects of teacher competences, underpinned by a literature review feeding into peer learning work (European Commission, 2011a), is given in annex 1 as a reference and starting point for dialogue in education and policy arenas.
- 30 Teachers' ability to draw conclusions and take decisions collaboratively, collecting and analysing evidence (such as pupils' learning outcomes, or external

¹ Kelly and Grenfell's European Profile of Language Teacher Education (2004) and the TUNING project (2005) both aim to develop shared reference guidelines about the competences of teachers. They provide reference frameworks for European teacher education programmes (and can express subject-specific perspectives); they also reflect international consensus on relevant aspects in describing teacher competences.

² OECD's TALIS International survey on Teaching and Learning deals with current perspectives and policies on teachers' effectiveness and professional development. It describes teacher quality as linked with pedagogical content knowledge, teaching philosophies and styles, self-efficacy and motivation, formative assessment and feedback (OECD, 2009, pp.19-28).

assessment or evaluation data) are fundamental for the development of an 'evidence culture' in education (Taylor & Nolen, 2004).

- 31 An understanding of teacher competences as 'dynamic combinations of cognitive and meta-cognitive skills' (González & Wagenaar, 2005) implies that there are four fundamental aspects: learning to *think, know, feel and act as teachers* (Feiman-Nemser, 2008).
- 32 **Learning to think as teachers** implies a critical examination of one's beliefs and the development of pedagogical thinking, i.e. linking objectives and means in teaching-learning processes. It implies not only analytical and conceptual thinking, but also the development of metacognitive awareness, i.e. thinking and deciding in teaching; reflecting and adapting practices (Anderson, 2004; Hay McBer, 2000).
- 33 **Learning to know as teachers** concerns the several aspects of knowledge required - including knowledge generated by one's own practices. Competences are dependent on sound frameworks of knowledge, supported by metacognitive skills and management strategies for swift retrieval and use (Feiman-Nemser, 2008). Deep subject knowledge and pedagogical content knowledge (PCK) are both needed; the knowledge of new technologies applied to subject teaching (PTCK-Pedagogical Technical Content Knowledge) is also fundamental in the digital age (Mishra & Koehler, 2006). Epistemological awareness is also necessary: the knowledge and understanding of historical, cultural and structural features of the subject area, linked with others across the curriculum. Knowledge of school curricula, class management, methodologies, education theories and assessment ought to be embedded in a wider awareness of the impact of educational aims (Darling-Hammond & Bransford, 2005).
- 34 **Learning to feel as teachers** is linked with professional identity: intellectual and emotional aspects (Hagger & McIntyre, 2006). It includes attitudes (commitment, confidence, trustworthiness, respect), expectations (initiative, drive for improvement, information seeking) and leadership (flexibility, accountability, passion for learning). It has to do with self-efficacy, self-awareness, and mediation between ideals, aims and school realities (Geijsel et al., 2009). Fundamental attitudes, which link skills and intentions, guiding teachers to courses of action, include teachers' dispositions towards democratic values, towards collaboration with colleagues for shared educational aims, and towards maximising the learning potential of every student (through individualized teaching, high expectations, etc.)(Feiman-Nemser, 2008; Council of Europe, 2008).
- 35 **Learning to act as teachers** entails integrating thoughts, knowledge and dispositions in practices that are informed by consistent principles. Effective teaching revolves around these variables: curriculum dimension, classroom management, teaching strategies, climate and evaluation/ feedback (Scheerens, 2007). However, the multidimensional, uncertain nature of teaching involves a wide range of activities, settings and actors. There is often a gap between beliefs and intentions and actual actions (Kennedy, 1999). Teachers need to deploy extensive repertoires of skills, strategies and action patterns eclectically, with the ability to judge and act in situation. Quality teaching requires adaptive skills,

and a systematic assessment of professional knowledge and actions - against a range of criteria coming from theories, research, professional experience and evidence - for improvement and innovation (Hagger & McIntyre, 2006).

- 36 Common ground across different cultures on the nature of teaching, teacher learning and teachers' competences can be outlined in six broad paradigms, which should be seen as integrated, complementary aspects of the profession (Paquay & Wagner, 2001):
- the teacher as a *reflective agent*
 - the teacher as a knowledgeable expert
 - the teacher as a *skilful expert*
 - the teacher as a *classroom actor*
 - the teacher as a *social agent*
 - the teacher as a *lifelong learner*.
- 37 Such a broad frame of reference can be a useful tool for analysis and dialogue, according to a systemic view of the teacher's professional development, in its tensions between person and institution, product and process, and what is desirable or possible. It echoes conceptualisations of six broad, interlocking areas of teacher expertise, which require both individual teacher learning and higher-level developments within the teaching-learning system (Schatz & Wieser, 2002; Schatz et al., 2007):
- *reflexivity* - developing professional thinking and discourse, based on situated pedagogic issues and experiences (Bastian & Helsper, 2000);
 - *professional awareness* - the conscious expertise of the teacher, as both subject-based and transversal, individual and within wider organizational structures (Bauer, 2000);
 - *individualization* - the knowledge, skills and attitudes to deal with diversity and inclusion – multicultural, gender and special needs issues – with a multi-perspective pedagogy based on appreciation of difference and respect (Prengel, 1995).
 - *cooperation* - the teacher's actions and attitudes oriented to dialogue and interaction in social contexts and professional communities - viewed as one of the aspects mostly needing development in school organizations (Bastian & Helsper, 2000; Terhart & Klieme, 2005);
 - *personal mastery* - a pre-requisite for the previous ones, entailing creativity and vision, in deliberate, informed, effective professional thinking, knowledge and action (Reh, 2004);
 - *a sixth integrating area*, combining all domains into a whole - the teacher's specific action, situated in a specific context structure – with the teacher's responsibility in actively shaping it and developing knowledge (Senge, 1996).
- 38 To sum up, the image below – an analogy with complex, flexible life structures - can convey an overall view of the competences of teachers, as embedded in multi-level systems characterized by diversity and change.

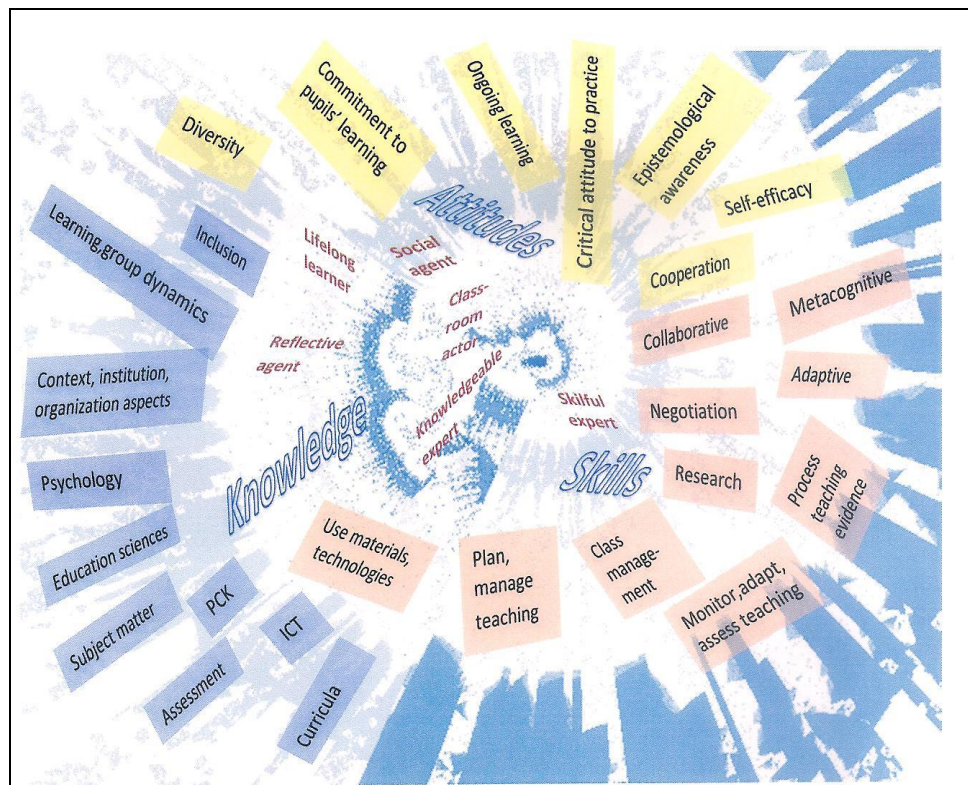


Figure 1 - Teacher competences: a fractal view (Caena & Margiotta, 2008; Paquay & Wagner, 2001)

Teacher expertise and the development of competences

39 Professional learning is a continuum starting in initial teacher education, carrying on through the induction phase and continuing throughout the rest of the career; in this context an issue for stakeholders and decision-makers concerns the possibility of reaching broad consensus on competence descriptions that span different levels of teacher expertise. Key aspects are:

- constant reflection in order to update practice, and
- membership of a professional community – a researcher, a receiver of feedback from colleagues, an innovator, an active collaborator of colleagues and principal (OECD, 2009).

40 Key features of teacher expertise, according to the literature, include:

- *routinisation* – i.e. the development of patterns of action and teaching repertoires;
domain- and subject-specific expertise in recognising patterns (recurring situations) in the complexity of classroom life;
- *sensitivity* to social demands and dynamics in the classroom;
- understanding problems;
- *flexibility* and improvisation;
critical examination of one's professional practice (in school and national contexts, as well as in professional dialogues) (European Commission, 2011b).

- 41 Two basic requirements are fundamental in the preparation of quality teachers:
- the capacity to systematically assess one's own knowledge base and professional practices, on the basis of a wide range of criteria coming from practice, theory and research; and
 - critical and responsive attitudes to innovation and professional improvement (Hagger & McIntyre, 2006).
- 42 The research suggests that the development of teacher expertise is quite slow, requiring at least three to five years; it implies teaching as a reflexive, purposeful practice and high quality feedback. The complex, mostly tacit nature of teacher's practical thinking entails elaborate cognitive processes for professional knowledge to develop (Hagger & McIntyre, 2006).

Competences and professional standards

- 43 A distinction needs to be made between definitions of teacher competences and professional standards. A *professional standard* endeavours to describe what teachers believe, know, understand and are able to do as specialist practitioners in their fields (Ingvarson, 1998). In particular, professional standards for teachers focus on *what teachers are expected* to know and be able to do. They are usually concerned with accountability and quality mechanisms, and are closely linked with the action of institutional and professional bodies. They can be defined as:
- *shared representations* of visions of practice, i.e. means for describing a consensus model of what is most valued in teaching knowledge and practice;
 - *measuring tools* for professional judgement , i.e. tools for making judgements and decisions in the context of shared meanings and values (Sykes and Plastrik, 1993), and/or instruments for providing specifications of levels of achievement (Kleinhenz & Ingvarson, 2007).
- 44 The purposes of professional standards can vary, according to the prevailing focus on one or more of the following aspects:
- *information*: they can be used as signals conveying information on teacher action and behaviour to diverse social groups
 - *guidance*: as principles directing the action of institutional and professional stakeholders
 - *modelling*: as model examples representing ideals of professional quality and practice for teachers, along different career stages
 - *management*: as uniform measures for relationships/transactions in teaching, teacher education and professional development
 - *monitoring*: as rules to be checked for compliance, by institutional and professional bodies.
- 45 The degrees of precision and prescriptiveness of standards can vary according to their subjects and uses. Since standards usually refer to systems of meanings and values as authority sources, standard setting entails creating political and technical consensus.

- 46 In educational policies, two contrasting approaches about standards can be found:
- a bureaucratic, 'technical' approach for accountability purposes, focused on measuring, monitoring, comparing and regulating individual behaviour; or
 - a 'developmental' approach, with loose definitions of competences indicative of performance, stressing principles and codes of practice.
- 47 The 'technical' approach focuses on observation, measuring and control; it is associated with a skills-based view of teaching and teacher quality, whose focus is on individual teachers' performance, rather than on overall professional development. It has been the object of some criticism; in the US, a preoccupation with technical standards has been viewed as 'education-draining' (Apple, 2005; Sergiovanni, 2000); in the UK, the risk of content overriding values, attitudes and personal qualities has been underlined (Furlong et al., 2000; Hargreaves et al., 2001).
- 48 By contrast, the 'developmental' approach to standards highlights values, purpose and agency in teaching - the ability to balance priorities about what is educationally desirable and make situated judgements, informed by theory and research (Biesta, 2009; 2010; 2011). It sees standards as descriptive tools for reflection, sense making and guiding professional action, helping to identify development opportunities and needs at individual, school level, and beyond (Conway et al., 2009; Darling-Hammond, 2000; Pyke and Lynch, 2005).
- 49 Some view standards as useful means for the legitimization of the knowledge base and profession of teachers, and thus for quality control and effective professional learning (Darling-Hammond, 2000; Kleinhenz & Ingvarson, 2007; Yinger & Hendricks - Lee, 2000). Critics of standards culture, on the other hand, warn against making linear, causal connections between teacher behaviour and student outcomes, which might overlook the nature of teacher competences as shared and context-bound (Ball, 2003; Conway et al., 2009; Pring, 2004). Instrumentalist approaches to standards for teachers as pedagogical technicians and knowledge testers might also underplay their role as independent, critical intellectuals and knowledge creators who respond to context and student needs (Hagger & McIntyre, 2006; Olssen et al., 2004). The variety, creativity and autonomy of teachers' practices might also be reduced by the use of standards for professional assessment and career incentives (Menter et al., 2010). Some argue that the presence of teacher standards is no guarantee of quality, since "the devil is in the interpretation" (Conway et al., 2009; Koster & Dengerink, 2008; Mahony & Hextall, 2000).
- 50 To sum up, studies on the functions and impact of the teacher standards culture in different countries show wide variations in the ways in which standards are implemented and used, according to the contexts and the responsibilities for judgement.

2 The value of frameworks of teacher competences

This chapter, which reports the outcomes of peer learning:

- Explains why education authorities, and the teaching profession, seek to define the competences required by teachers; and
- Outlines the benefits of doing so.

Why define teachers' competences?

- 51 There are many factors that may encourage governments (or others) to define the competences that they expect teachers to possess at different stages of their career. These include:
- the results of research and of international comparisons such as PISA and TALIS;
 - international commitments such as the Bologna process of Higher Education reform or the development of Qualifications Frameworks;
 - the desire to enhance the quality or effectiveness of education;
 - other system developments, such as moves towards expressing school curricula in terms of learning outcomes, or reforming the system of teacher education;
 - demand from parents or other stakeholders for greater accountability in education systems.
- 52 Concerning the teaching profession itself, motivating factors might include:
- the need to make the teaching profession more attractive and provide for career progression;
 - the desire to promote teachers' lifelong learning and engagement in continuing professional development;
 - demand for the professionalisation of teaching;
 - a desire to clarify teachers' roles;
 - the growing importance of the role of school leadership; and
 - the need to assess the quality of teaching.
- 53 In some contexts, the move towards defining competences may be driven by a strong agent for change (e.g. a Teaching Council or other professional body). However, it is worthy of note that, by and large, in Europe teachers themselves seldom seem to be the driving force for this kind of change.

The policy example of Belgium (Flanders) (Annex 3.1) sees the implementation and revision of competence frameworks that have different functions, reflecting different stages and profiles of the teacher's career, within a web of reforms for educational quality by the government. Such competence frameworks aim to provide guidelines for teachers' and stakeholders' common understanding, awareness, discourse and practice, with a focus on lifelong professional development.

Added value

- 54 The process of bringing all the relevant stakeholders together in the common task of describing competences can, in itself, be beneficial by stimulating discussion and debate and by promoting shared understandings. But beyond this, other benefits of developing such frameworks include:
- Language: the process can help the teaching profession develop a common discourse that facilitates professional dialogue, making explicit that which is currently (only) implicit.
 - Such a framework can provide important support for teachers and can:
 - facilitate a discussion about what society can expect from teachers and what teachers can expect from society, thereby providing teachers with a sense of security in their roles;
 - highlight the professionalism / knowledge / skills that are unique to teachers;
 - provide teachers with a clear image of their profession and its role in society, leading to enhanced professional pride and social standing; and
 - be a starting point to encourage teacher self-reflection, and therefore point teachers towards possibilities for further professional development.
 - It can also provide useful benchmarks / baselines:
 - In the assessment of probationary teachers;
 - In the assessment of serving teachers.
 - In addition, in some contexts, competence frameworks have been used in the processes of:
 - granting or withdrawing licence to teach,
 - the management of teachers' performance and / or professional development (e.g. in regular discussions between the school leader and the teacher),
 - the design of programmes of initial teacher education (ITE), induction (early career support) and continuing professional development (CPD).
- 55 The purpose of a Framework needs to be clearly determined before the process starts, and needs to be kept under review throughout.
- 56 To sum up, if planned and undertaken appropriately, the development of comprehensive frameworks that define and describe the competences that teachers are expected to deploy, can bring numerous benefits to education systems. In particular, they can:
- be effective ways to stimulate teachers' active engagement in career-long competence development;
 - be instruments for assessing the development of teachers' competences, and
 - be a sound basis for the planning and provision of coherent, career-long provision of appropriate opportunities through which every teacher can acquire and develop the competences s/he needs.

3 Defining teacher competences: the current situation

This chapter is based upon a survey of members of the European Commission's Thematic Working Group 'Professional Development of Teachers', carried out in 2011 and updated in 2013³. It outlines:

- the key features of current policies on teacher competences in EU Member States;
- the variety of ways in which they have been developed and are used; and
- some implications for policy.

Defining teacher competences: examples from around Europe

57 In national educational policies, there is a wide variety of approaches to defining the competences that teachers are required to be able to deploy, ranging from a 'light touch' to complex description; some examples are:

- government decrees on university qualifications, giving very general guidelines (e.g. Finland);
- general guidelines, defining the obligations and broad outcomes expected of teacher education curricula, without specific lists of competence (e.g. Croatia);
- legislation broadly defining qualifications, pre-requisites, training requirements, and outcomes of teacher education for specific levels of schooling (e.g. Luxembourg);
- legislation describing teacher competences and skills as expected outcomes of teacher education, within a national framework concerned with education, rather than with teacher quality as such (e.g. Denmark);
- national acts regulating the organization and definition of curricula, examinations and certifications in initial teacher education and professional development (e.g. Austria);
- legislation defining entry qualifications, employment, teacher status, in-service training, and quality criteria for performance assessment (e.g. Malta);
- university curricula for initial teacher education mentioning teacher standards, defined by ministry regulations (e.g. Poland, Slovenia).

58 General guidelines about the competences required for teaching (e.g. methodological or reflective competences) are usually embedded in national education curricula, as references for initial teacher education or continuous professional development (in Croatia, Cyprus, Denmark, Finland, Germany and Spain). Autonomy is then left to university or college providers to develop and apply detailed competence requirements in teacher education programmes, accordingly.

- 59 Broad, basic competence areas (e.g. assessment competences) can be found in other cases, as used in either initial teacher education and/or continuous professional development - e.g. in France, Hungary, Luxembourg (ISCED 2), Poland, Slovenia. A shift towards describing initial teacher education standards in terms of outcomes, rather than processes, can be found (Poland).
- 60 A list of broad competence areas can also be further broken down into specific subject profile requirements, to be included in teacher education programmes, as in Germany, where in some Länder the future development of a common framework linking competences in ITE (second phase) and CPD is also in view.
- 61 At the other end of the range, in a few countries there can be structured frameworks - detailed lists of specific competences (broken down as lists of skills, knowledge, attitudes or values; providing indicators or can-do statements; distinguished by subject area and/or school level), often linked to professional standards and career advancement (in Belgium (Flanders), Estonia, the Netherlands, UK (Scotland)). These frameworks generally describe different levels of expertise – such as 'beginner' or 'advanced teacher'.
- 62 A continuum perspective can increasingly be detected in policies about teacher competences - for instance in Ireland, where a policy for the continuum of teacher education is being implemented, or in Austria, where there is a programme for teacher professional development as a quality continuum (EPIK).
- 63 In several countries, a focus on teacher competence definitions is linked to reforms (e.g. Austria, Cyprus, Czech Republic, Estonia, Germany, Hungary, Ireland, Latvia, Poland, Spain, Sweden).
- 64 In the case of Sweden, the development of competence descriptions for initial teacher education and induction (with detailed qualifications by school level and subject) has been going on since 2006, and implementation started in July 2011, with the aim of strengthening the continuum of teaching professional quality.
- 65 Spain has had an education framework describing teacher competences since a 2006 national law; initial teacher education is regulated by guidelines for university curricula that define teacher competences. There are ongoing discussions about employing competence descriptions for the assessment of teachers' professional development as well.
- 66 Hungary reports the recent introduction of teacher competence descriptions for initial teacher education, with Education Acts that define the programmes and outcomes of teacher education for different school levels.
- 67 Latvia has recently introduced descriptions of teacher competences in different areas, concerning continuous professional development, and is going on to focus on competences for initial teacher education as well.
- 68 In Germany, the Standing Conference of Ministers of Education and Culture (KMK) has recently agreed detailed standards in subject-specific matters, as well as in the so-called *Bildungswissenschaften* (including pedagogy, psychology and

³ Complementary information can be found in 'Key Data on Teachers and School Leaders: http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/151EN.pdf

sociology); they are recommendations for policy makers in ministries of the different Länder. These standards, broken down into detailed lists of competences, are also the bases for recognition of final examinations across the Länder. The competences are meant as guidelines for study programmes for initial teacher education at Universities; they are in line with the competences to be developed in the Second Phase of teacher education and in CPD, especially in the Länder with a high awareness of the continuum of teacher education and an integrated approach. In 2009 the KMK published a concept note for the use of these '*Bildungsstandards*' for classroom management and development.

- 69 Finally, the Netherlands and UK (Scotland) have a long-standing tradition of detailed, comprehensive competence frameworks; despite their culturally-connoted, different visions of the teacher's role and profile, they may be useful examples for a common discourse in Europe about teacher professionalism. The Dutch frameworks provide a three-level description for each of the seven key teacher competences. First there is the description of the visible aspects of the competence (what must be achieved, and how); then, there is the competence requirement, which implies specific professional attitudes, knowledge and skills; finally, indicators describe concrete professional actions revealing the teacher's competence. Scotland's teacher standards, introduced in 2000 in government guidelines about initial teacher education, are common to teachers of all levels and subjects (with minor differences), and specify features of different career stages and professional profiles. They build up a detailed, analytical framework, stressing the interaction and interdependence of the three competence dimensions – values, knowledge and skills, each broken down into lists of specific aspects – feeding into professional actions. The frameworks specify requirements and indicators for each competence; 'can-do' statements give examples for each aspect.
- 70 All the teacher competence descriptions – both detailed and general ones, either for the teacher education continuum or limited to initial teacher education, mirror concern with the development of the eight European key competences for lifelong learning and highlight the relevance of collaborative, research and reflective competences in teachers as adaptive experts and lifelong learners.
- 71 This analysis suggests that countries vary in:
 - the *level of detail* in which teacher competences are described (or not),
 - whether competences are described only for initial teacher education, or as competences that are expected to grow and develop over the whole teaching career;
 - the *policy tools* used (legislation, regulation, guidelines, university curricula, specification of learning outcomes, requirements for entry into the profession, teacher certification);
 - the *actors* who are entrusted to implement policy (Government organisations, teacher education Institutions, professional bodies such as Teaching Councils); and
 - the *aims and uses* to which descriptions are put.

- 72 It can also be seen that not all countries have yet defined in detail the competences they require their teachers to possess or develop.

Using teacher competence frameworks: examples from around Europe

- 73 The presence of teacher competence descriptions does not, of course, in itself guarantee the quality of teaching, since what counts is their purposes and the way they are applied, which are embedded in specific cultural contexts and constraints. Finland, for instance has a long-standing culture of trust and autonomy in teacher education providers and teaching professionals, and does not show a pressing need for teacher competence frameworks or standards as linked to educational accountability. Equally, the obligation on teacher education Institutions to cover certain areas of teacher knowledge, or to equip new teachers with certain competences, does not necessarily ensure that this is actually done, given the wide cross-country variety in the degrees of autonomy of university providers, and in the effectiveness of quality control mechanisms.
- 74 Overall, descriptions of teacher competences (whether detailed, broad or general) seem to be currently used as references for the delivery, assessment and evaluation of initial teacher education programmes and outcomes; their relevance is also highlighted for continuing professional development and in-service training (for half of the respondents). They can be employed not only for summative or quality assurance purposes, but also for formative aims; for instance, self-assessment processes in induction (e.g. Estonia).
- 75 Different methods are used to filter the quality of teachers, mostly at the point when they leave initial teacher education institutions, e.g. through national examinations (Croatia, Slovenia); in a few countries there are entry selection filters to ensure that the best candidates enter the teaching profession, with responsibility placed at different levels (nationally in Cyprus, locally in Hungary), and different methods: interviews (Malta), orientation and/or counselling activities (Austria), threshold level requirements (Latvia).
- 76 In the Netherlands, selective national accreditation processes ensure the competence and quality of new teachers. In fact, countries with detailed teacher competence frameworks usually have external quality assurance processes in place (Belgium (Flanders), Estonia, Ireland, the Netherlands, UK (Scotland)).
- 77 In the Netherlands and Scotland, a long-standing tradition of teacher competence frameworks provides common orientations and a shared discourse between education stakeholders, linking initial and in-service training. Germany and Sweden have both been developing comprehensive policies to promote the continuum of teacher education - a common Educational Monitoring Strategy in Germany, and a policy focus on teacher competences in Sweden - which aim at teacher quality as connected to student learning and educational improvement.
- 78 As for policy approaches to ensure that teachers carry on developing their competences, the key role of professional development for teacher and teaching quality is increasingly acknowledged; continuous professional development is funded and compulsory in most cases, it is linked with career advancement, and its length prescribed.

- 79 In some cases, a teacher performance evaluation system is also being developed (Latvia, Spain); in Germany, economic and career advancement incentives are linked with an external assessment of teachers' competences. Moreover, in some countries teachers are encouraged and supported to upgrade their competences and acquire higher academic qualifications (the Netherlands, Sweden).
- 80 A shift can be detected in many countries, towards giving responsibility to school management for ensuring competence development and mastery in teachers. Within a scenario of decentralization and autonomy of school institutions, the latter become responsible actors for planning and providing relevant, in-service training that takes into account specific needs of the workforce (e.g. in Estonia and the Netherlands).

Policy implications

- 81 The need to define and develop reference frameworks of teacher competences is highlighted by the increasing focus of comprehensive policies and reforms, cross-nationally, on education improvement and quality, underpinned by a perspective that sees teacher competences as developing incrementally throughout a continuum from initial teacher education to career-long professional development.
- 82 Wide variety prevails, across European states, in the current approaches to teacher competences: in their definitions (general guidelines, broad competence domains or detailed descriptions); in the policy measures and regulations about their description, implementation and use; in their functions and purposes within national education policy strategies; in the roles and responsibilities of actors and stakeholders.
- 83 As the examples of some countries show, teacher competence frameworks can be useful reference points for ensuring quality in the selection of teachers, in their preparation and in their professional development, facilitating effective dialogue between different stakeholders about policy planning and implementation.

4 Developing and implementing frameworks of teacher competences

This chapter, based on peer learning:

- Outlines the conceptual basis which ought to underpin the development process of teacher competence frameworks;
- Discusses the ways in which a social consensus about the competences of teachers can be developed;
- Highlights some implications of the processes and roles in defining competences and implementing the framework.

- 84 A framework of teacher competences is not a panacea. It is but one of a number of instruments that can be used to support teachers' professional development, and to promote quality in education. Teachers work within systems; these need to enable teachers to deploy and develop their professional competences.
- 85 The development of teacher competence frameworks requires a method, based upon the stated purpose. Comparison of the approaches used in several European countries has shown that a range of factors needs to be taken into consideration when embarking on such an undertaking. These include:
- the conceptual basis,
 - ownership,
 - purpose,
 - the process leading to a framework of teacher competences,
 - the framework features , as well as
 - putting complex teacher competences into words,
- and they are discussed in greater detail below.

The importance of the conceptual framework

- 86 As for any proposed change in educational systems, it is important that there be a social consensus about what education, school, and indeed, teachers are *for*. Work also needs to be set in the context of the local or national understanding of the continuum of teacher education (encompassing initial teacher education, the induction or probationary period, early professional development, continuous professional development and leadership development) and the modern learning environment.
- 87 It is also important that those involved are aware of the national and international educational context including, for example, different cultural-linguistic assumptions (how we talk about *Bildung* and education, *Pädagogik* and learning-teaching, and so on), or different approaches to defining quality in education (e.g. outcome-oriented or process-oriented) (Biesta, 2011). Equally, there are different ways to understand 'teacher professionalism'.

- 88 It should be remembered that the broad spectrum of teachers' work can be described in many ways. Furthermore, not every aspect of teaching can be fully described or defined; aspects such as the teacher's professional values, dispositions and attitudes can be just as important as more measurable and quantifiable aspects. It is important to acknowledge, for example, teachers' ability to use wisdom, judgement or creativity in responding to different situations.
- 89 Conceptions of teacher competence may be situated along several continua, e.g.:
- teaching viewed as a 'craft' vs. teaching viewed as a 'profession';
 - 'centralisation' vs. 'autonomy' (of schools, teachers ...);
 - 'control' vs. 'trust';
 - 'stagnation' vs. 'growth';
 - 'teacher complacency' (passive acceptance and compliance regarding social and policy situations, e.g. top-down regulations) vs. 'teacher agency' (teachers proactively taking action to produce a desired result).
- 90 In short, the use of frameworks of teacher competence can develop in two broad directions: towards promoting teacher agency, empowerment and responsibility, or towards an intensified, external control of teachers that might have unintended, disempowering effects.
- 91 As noted in Chapters 1 and 2, there are closely-linked questions of language and meaning. The current terms 'competence' and 'standard' can be defined in several ways, which are sometimes overlapping or complementary. Each concept of teaching and learning implies conceptualisations of teachers' profession and competences, and vice versa; there may be implicit, competing values underlying different conceptual approaches.
- 92 In this context it should be recalled that there are as many different kinds of teaching as there are teachers; each of these has the potential to be of high quality; diversity in teaching can be valued as a strength; uniformity is not the aim.

Ownership

- 93 If the development of a framework of teacher competences is being considered, the issue of ownership needs to be addressed. The stronger and deeper the involvement of a significant proportion of teachers at all stages of the process of developing the framework, the more likely it is that they will feel ownership and accept the outcome. Involvement implies more than merely informing or consulting teachers; however, in many countries, teachers are not yet organised in a way to be able to take the lead. The process, for example, may be more easily accepted by teachers where there is already a culture of:
- teacher self-evaluation,
 - teachers' reflection on their own work, and
 - teacher professionalism.

- 94 Ownership can be promoted by:
- clear educational leadership at all levels within the profession and the education system;
 - bringing about change through consensus, in order to ensure active implementation;
 - using ever-wider circles of consultation and several opportunities for involvement, and
 - ensuring that teachers' involvement in the process is facilitated (e.g. by being included in working time) and acknowledged.

Purpose

- 95 It is important that all parties are clear from the outset about the stated purpose of any framework, as this will affect how it is conceptualised and described (e.g. low-stakes uses may require very different frameworks from high-stakes uses). Issues to be considered include:
- what needs the framework responds to;
 - whose needs they are (teachers', pupils', institutions' ...), and
 - the expectations of the different stakeholders from this exercise.
- 96 It should be noted that the purposes of the framework of teacher competences may well evolve over time. Furthermore, once established, it may be used for purposes for which it was not designed; this may have negative consequences.
- 97 It is also important for all parties to understand the potential consequences of going down this path. Starting to define and describe teacher competences may bring to the surface existing tensions, e.g. between the demands for external 'control' or performance management, and demands for teacher professional autonomy.

The process of defining teacher competences

- 98 Assuming that there is consensus around the purpose of the project, a comparison of the approaches used in several countries suggests that it can be facilitated by:
- a high level of long-term government commitment to the process;
 - securing the ownership of teachers and other stakeholders throughout;
 - advocacy for, and promotion of, the approach at all levels;
 - the roles of all the parties in the process being clearly stated;
 - allowing enough time to do the job well; a realistic time schedule with a clear end-point, and
 - undertaking several iterations (opportunities for all parties to comment).
- 99 Each country will find its own way to arrive at its first draft Framework of Teacher Competences. It is important at this point to consider who will be involved in the reflection and then the drafting process. The inputs into the process should also be considered; some countries have found it very helpful, for

example, to commission a review of the relevant literature, or cross-country comparisons, as a starting point, or a feedback for monitoring/improving quality in teaching and teacher education (e.g. Conway et al., 2009; Donaldson, 2010; Menter et al., 2010).

100 Whatever process is chosen, there always has to be a first draft; the content of this draft is less important than its use as a tool to start off the discussion, and to motivate all the stakeholders to get involved in an iterative process of development. It should also be recalled that the process does not end with the adoption of the first framework of descriptors – frameworks need to be implemented effectively, and kept under regular review.

101 Useful questions to ask about a process of defining competences include:

- To what extent are teachers (willing to be) involved in the process?
- Are teachers' perspectives sufficiently present in the text?
- What are the most effective ways of involving teachers in each national / regional context?
- Who are the relevant stakeholders?
- How are all stakeholders to be consulted / involved?
- How should any framework be introduced (e.g. through a pilot phase? in stages? for certain purposes only?)
- By what means will information be gathered about the impact of the new approach? How will this information be used to re-evaluate and revise it?

102 The list of relevant stakeholders will vary from country to country. As well as individual teachers, their associations and unions, other stakeholders might include: different levels of government, inspectors, teacher education Institutions, Teacher Educators, parents - and of course, pupils.

In Ireland (Annex 3.2) the development, implementation and revision of a competence framework, within a teacher education continuum embracing initial teacher education, induction and professional development, is managed by a professional body guaranteeing quality – the Teaching Council – and reflects the ownership and involvement of the profession throughout the process, by means of repeated consultation rounds. An instance of detailed competence descriptors spanning the three areas of knowledge, skills and competences is given in annex 3.2., reflecting the framework's revision following up educational reform.

Key features of a framework

103 Comparison of the approaches used in several countries shows that, to be successful, such a framework should:

- be grounded in the culture, including the educational culture, of the country;
- be based upon a negotiated consensus about the purpose of teaching and about what constitutes successful teaching and learning;
- be based on a clear statement of the underlying educational / teaching philosophy;

- accommodate all the dimensions of teachers' professional work, in an integrated way;
- be based on the understanding that teaching involves a cycle of self-evaluation and improvement;
- be consistent with (but not limited by) the desired learner outcomes (e.g. in national curriculum guidelines);
- have the key attributes of stability, durability and flexibility.

104 In particular, there are advantages in building flexibility into the framework of competences; e.g.:

- There may be a general framework that is interpreted locally;
- it can answer the need to be specific, yet leave room for creativity;
- it should not limit professional action / agency.

105 Key questions to be asked include the following:

- What philosophy / rationale underpins the framework? What vision:
 - of education?
 - of teaching?
 - of leading learning?
 - of teacher professionalism?
- How is the framework to be structured? (e.g. what headings, what taxonomy are used?)
 - It may be useful to describe the concepts underpinning the framework in a visual way (jigsaw, interlocking circles, etc.).
- Who formulated it?
 - There is a choice to be made about whether the impetus should come from above or below, from teachers or from other stakeholders.
 - However, all stakeholders need to be, and feel, fully involved throughout the whole process.
- Who is it for?
 - Possibilities include: pupils, parents, teachers themselves, school leaders, teacher educators, society as a whole, the labour market, employers...
- Are the competence descriptions to be:
 - applied to all stages of the teachers' career? (e.g. will there be different levels of each competence for different career stages?)
 - applied to teachers at all levels of education? (pre-primary, primary, lower secondary, upper secondary ...)
 - oriented to the present or the future?
- If teachers are to be required to offer evidence that they meet each competence, in what ways will they be able to do this?

Putting teacher competences into words

- 106 Defining and assessing teachers' professional knowledge and competence at any career stage is not simple or straightforward, neutral or universal, fixed or certain, but historically and culturally bound, subject to change and contestation. Therefore, competence statements, so as to recognise the multifaceted nature of teaching, and acknowledge the role of values, need to be clear and not over-elaborate (Conway et al, 2009). The processes of introducing a framework of teacher competences and writing the descriptors are inextricably linked, and need to happen in parallel.
- 107 Components of teacher competences often include *knowledge, skills and attitudes (or values)*. The descriptors should:
- reflect the culture and context in which they will be used;
 - be expressed in a way that promotes teacher agency;
 - be based on a culture of trust;
 - motivate each teacher to grow as a professional;
 - be of sufficient detail for the intended purpose;
 - be dynamic, rather than too fixed (to ensure that they can be further developed in line with changing circumstances);
 - use language in which teachers can recognise themselves and their school reality, and that is:
 - as concrete as possible,
 - unambiguous,
 - clear, simple, understandable by all users,
 - consistent,
 - empowering, affirming and positive,
 - action-oriented (e.g. can-do statements with examples of concrete applications to teachers' daily work).
- 108 For example, the experience of several countries suggests that it is helpful for the framework to be accompanied by texts that use professional exemplars based on real teaching situations to illustrate the meaning behind each descriptor.

Implementation

- 109 The process of implementing a framework of teacher competences needs to be carefully planned and agreed by all actors, and adequately supported throughout the education system. The implementation process needs to be coherent with the stated purpose of the undertaking. The choice of developing an all-encompassing framework or separate frameworks according to education levels, as well as the degree of detail in descriptions, should thus be viewed as embedded in the cultural context of each country, and dependent on specific needs.
- 110 Some key questions include:

- How will the relevant actors - including the teachers themselves - be prepared for the (possibly several) different ways in which the framework is to be used in your country?
- If the framework is to be used in any form of assessment, how will a common understanding be developed about the interpretations of the different descriptors? - e.g. by organising discussions between different users such as mentors, School Leaders, Teacher Educators (in some countries, inspectors as well), about what the descriptors mean).
- How will feedback from users during the first months be gathered and analysed?
- Based on this feedback, how will improvements be proposed and implemented? How will the framework be kept under continuous review?

The policy example from the Netherlands (Annex 3.3) represents an example of ownership and active involvement of main stakeholders, in the process of implementation and revision of teacher competence frameworks. Regular evaluation processes mirror active professional debate and responsibility for teacher quality and identity, as well as dialogue and consultations between the teachers' professional body, the government and other relevant stakeholders. This reflects a clear definition of stakeholders' roles and responsibilities in maintaining teacher quality and educational effectiveness.

5 Helping teachers to acquire and develop professional competences throughout their careers

This chapter presents and discusses:

- policy suggestions concerning effective ways of:
- stimulating teachers' lifelong professional learning,
- assessing their competences with consistent tools,
- tackling objectives and outcomes, and
- providing relevant learning opportunities for teacher competences development; and
- advice about key conditions for policy success in this field.

Developing teacher competences: the current situation in Europe

- 111 While policies to promote teacher professional development exist in most Member States, they remain rather limited in nature. Nearly 90% of teachers say they have recently taken part in professional development activities, but there is considerable country variation in the type of activity, its impact, the intensity of participation, and the age and proportion of teaching staff participating.
- 112 Continuing professional development (CPD) is considered a professional duty for teachers in 24 European countries or regions. In France, Lithuania, Romania and Slovenia, taking part in CPD is a prerequisite for career advancement and salary increases. Ten countries provide teachers with financial allowances for obtaining further CPD qualifications.
- 113 However, teachers' perceived need for professional development seems to be greater than the actual opportunities they have. Many teachers either do not find suitable professional development, or cannot attend because of conflicting work schedules. A considerable proportion of teachers feel that they require more professional development than they currently receive (OECD 2009).
- 114 Good practice increasingly views teachers as lifelong learners. In this context it makes sense to apply to teachers the same principles of individualised learning as they employ with learners. Member States thus need systematic programmes to assess teachers' learning needs, and provide relevant individualised training. To be most effective, teachers' professional learning should be based upon an assessment of their specific learning needs and feedback about their teaching.
- 115 Generally speaking, however, not enough teachers receive effective and regular feedback on their own teaching performance to support their professional development effectively. Some countries (e.g. Bulgaria, Lithuania and Slovak Republic) have made efforts in this direction. The absence of feedback is particularly acute for new teachers; many new teachers report never having

received feedback (e.g.: 55% in Italy, 45% in Spain, and 25% in Portugal and Ireland) (OECD 2009).

- 116 More than 13% of teachers report that they have never been appraised. Large numbers of teaching staff only receive appraisal and feedback once a year or less. What is more, even when teaching staff were appraised, they often did not receive relevant feedback on their performance. In Italy, Spain, Portugal and Ireland over a quarter of teachers said that they had not received feedback on their performance. At the other end of the scale, almost all teachers in Bulgaria, Lithuania and the Slovak Republic said they received feedback on their work.
- 117 Research shows that effective teacher learning is school-based and collaborative. Collaborative continuous professional development is more effective than individual learning in bringing about positive changes in teachers' practice, attitudes or beliefs, in bringing improvements in pupils' learning, behaviour or attitudes, and in bringing positive changes in teachers' classroom behaviours and attitudes (GTCE 2005).

Supporting teachers' professional learning

- 118 As noted in the previous chapter, every society needs to have a shared understanding about what it means by 'quality' and 'competence' in teaching. These are political and moral issues, whose key relevance – for a social profession underpinned by multiple views on aims and knowledge bases for practice – calls for consensus and intellectual rigour in professional preparation (Cochran-Smith, 2006; Hansen, 2008; Sockett, 2008).
- 119 Whatever understanding is arrived at in a given context, the ultimate purpose of systems of teacher education and professional development must be to support teacher learning - and all learning has the development of the learner's potential as its aim. The system rationale for encouraging teacher learning is that it enables teachers, as adaptive experts, to be as effective as possible in supporting the learning of students in specific contexts (Hatano & Oura, 2003; Williamson McDiarmid & Clevenger-Bright, 2008). Knowledge about teaching is developed by teachers themselves, as they use theory and research to reflect upon their practices in professional learning communities (Darling-Hammond & Bransford, 2005; Hagger & McIntyre, 2006).
- 120 But teachers need actively to maintain and further develop their professional competences throughout their careers, in an ongoing professional development process which at the same time supports the individual engagement and professional profiling of teachers. For teacher education systems to enable all teachers to acquire and develop the competences they need, three key system components are needed:
- *stimulating* teachers' active engagement in career-long learning and competence development, in effective ways;
 - *assessing* the development of teachers' competences, with tools that are aligned with the purpose and design of the teacher competence model being used in each system, and

- *providing* coherent, career-long appropriate and relevant learning opportunities, through which every teacher can acquire and develop the competences (s)he needs.

These key system components are each dealt with below.

Stimulating teachers' engagement in professional learning and competence development

- 121 It is possible to stimulate teachers to engage positively in developing their competences through a competence development plan that might:
- be based upon a clear model of teacher competence with sound theoretical underpinnings, on which there can be consensus;
 - promote teachers' self-reflection;
 - respect individual teachers' different starting points and levels of interest by offering a mix of options, incentives and requirements; and
 - leave room for school autonomy in implementing continuous professional development plans.
- 122 A key question is: 'how to inspire teachers to be proactive, reflective professionals who take ownership of their own professional development?' Teachers vary in their learning styles, their level of engagement and their understanding of the benefits of acquiring and developing their competences. Therefore, their focus on internal or external stimuli for engagement in professional development will vary.
- 123 Teacher engagement in competence development can be stimulated by offering a mix of *opportunities, incentives and requirements*. The opportunities for competence development should meet the following conditions:
- matching needs and demands at all levels – building a bridge between the needs of the teacher and those of the school (and education system);
 - accessibility, relevance and variety of opportunities on offer;
 - proper coordination between the content of ITE, induction and CPD, and the providers at each phase;
 - being based on dialogue with stakeholders (teachers and unions, school managers and employers, school authorities and national ministries, teacher educators and universities, CPD providers) at all levels, to secure commitment and shared understanding;
 - adequate provision of time and resources (e.g. substitute teachers to cover for training absences).
- 124 For teachers who are mainly stimulated by external factors, different material and non-material incentives can stimulate engagement in professional development; depending on the context, these may include:
- opportunities to develop as professionals;
 - opportunities to fulfil other roles and take on wider school responsibilities;
 - recognition by colleagues and education authorities;
 - seeing the success of their pupils;

- the appreciation of the school leader;
- the respect of the local community, including parents; and
- salary increases.

The Swedish policy example (Annex 3.5) suggests several ways to encourage teachers to acquire and develop professional competences throughout their careers – which can include, beyond competence-based initial teacher education degrees, a related teacher registration system requiring induction and assessment, as well as differentiated career pathways (academic or practical) linked to state grants or additional professional responsibilities.

Assessing the development of teachers' competences

- 125 Measures to assess the development of teachers' competences are important because they:
- can raise teacher's awareness of the need to develop her or his competences;
 - can support a transformation in teaching culture and practice;
 - permit the recognition of the (new) competences acquired or developed;
 - play a part in the quality assurance and control of training and development, thereby leading to its improvement and helping to achieve excellence;
 - can help to develop trust in the teaching workforce; and
 - can facilitate timely intervention to improve teaching.
- 126 The assessment of teachers' competences needs to be based upon a *shared understanding* about the competences required by teachers, such as a national framework of teacher competences. There needs to be a common understanding about what is being assessed.
- 127 An assessment framework should mirror the competence framework and include measures (e.g. the use of teacher portfolios) applicable in the initial teacher education, induction and continuing professional development phases of the teacher's career, with coherence across the three phases. To facilitate the use of such frameworks in assessing competence development, and to encourage teachers to develop further, *different levels* of achievement should be identified for each competence.
- 128 Some key choices to be made when establishing a competence assessment system include:
- a choice of focus on the individual, the school or the system;
 - the relationship between assessment systems and the quality assurance system;
 - whether the assessment system will concentrate on:
 - supporting teachers' development (formative - on a continuous basis), or

- on monitoring their progress (summative – possibly, with the recognition of a higher
 - competence level, or decisions on salaries/ new roles); and
 - whether it will *focus on the process or the outcome* of competence development.
- 129 Assessment systems that focus on the *process* of competence development take into account the amount of competence development activities that are undertaken by individual teachers. In some countries, teacher ‘career systems’ award higher salaries to teachers who have attended a certain number of hours of training, without assessing its possible impact. Even though such systems stimulate engagement in competence development activities, they focus on the *input* (attendance at a training course) but have a blank spot with respect to the *outcome* (the change in competences or the improvement in learner attainment). In this way, an important opportunity to use salary increments as an incentive to improve performance in the classroom is missed (OECD, 2009).
- 130 In the development of *assessment systems*, several issues ought to be taken into account:
- the need to find the right balance between trust and control;
 - the need to be fair, transparent and comparable (across schools, regions and educational systems);
 - the use of internal or external assessment;
 - the focus on the teacher’s knowledge, skills and attitudes;
 - the role of different stakeholders in the assessment process, (e.g. school leadership, peers, pupils, parents, inspectors, educational authorities, local and national government, employers and other stakeholders);
 - the level of assessment - e.g. individuals or groups of teachers; school institutions and networks; regional and system levels – at national or even international level.
- 131 The *tools and techniques* deployed in assessment systems are several and diverse, and can be chosen to fit the national context.
- *Formative* assessment tools and techniques (low stakes for the teacher) include:
 - regular meetings with principal or other staff – reviews of competences,
 - self-assessment,
 - critical friends groups,
 - peer review,
 - individual development plans (for a review or for auto-evaluation),
 - classroom observations by peers (for positive examples),
 - video analysis (filmed lessons),
 - written reflections/narratives,
 - reports,
 - portfolio (inputs/outputs),
 - action research (self-reflection),
 - student/parent feedback.

- *Summative* assessment tools and techniques (high stakes for the teacher) include:
 - examinations,
 - classroom observations,
 - micro teaching
 - video,
 - essays,
 - testing,
 - portfolio (showcase – i.e. displaying evidence of achievement/ qualifications/ outcomes).

Providing the right opportunities for professional learning

- 132 As Ministers have agreed, initial teacher education should provide all student teachers with the core of professional competences upon which they can build throughout their career. Beginning teachers should receive a *systematic programme of support* (induction) during their first years in the profession – in order to have opportunities to start the further development of these competences (European Commission, 2010). After the induction phase, all teachers need to be engaged in a *continuous process of assessing and developing their competences* further.
- 133 Providing possibilities for further professional development and education can be a useful policy tool to motivate teachers to stay in their profession and to attract qualified personnel to teaching and school leadership positions. There needs to be *coherence* between the systems that concern the three phases of a teacher's career, in terms of:
- an *incremental perspective* (e.g. initial teacher education promotes the necessary research based knowledge, professional attitudes and skills for lifelong learning, paving the way for effective competence development during induction and CPD);
 - *single frameworks of competence* covering all three stages; and
 - *structures* (e.g. political responsibility for teacher education, induction and continuing professional development under one Ministry/administrative body; unified networks of providers of teacher education and continuing professional development, and so on).
- 134 It is in this *career-long context* that opportunities for staff to develop their competences need to be planned and provided; the complexities of the teaching profession require a lifelong learning perspective to adapt to changes, evolving constraints or needs. However, international studies have shown that in-service training, considered as a professional duty in about a half of all European states, is in practice optional in many. Incentives to encourage participation in CPD are few (and penalties for no participation rare). Moreover, CPD activities appear loosely linked with instruction, evaluation and feedback; a stronger integration of different functional domains of schooling seems necessary (OECD, 2009).
- 135 A 'professional development opportunity' should entail much more than 'attending a course', and be understood to comprise a *wide range of formal, non-formal and in-formal learning activities*. It is important that all teachers in

schools are encouraged to reflect upon their own experiences in the light of different theoretical views, and experiment with new approaches, also in a wider concept of a European Teacher - as outlined by ENTEP (*European Network of Teacher Education Policies*).⁴

- 136 Taking stock of the weak impact of 'one-shot' professional development approaches, a '*change as professional learning*' perspective, inspired by theories of situated cognition and adult learning, sees the teacher as a reflective practitioner, responsible for learning to improve professional performance. Accordingly, there is the shift from a *technical-rational-top-down* approach, towards a more *cultural-individual interactive* approach (Anderson et al., 2000; Putnam & Borko, 2000; Slegers, Bolhuis & Geijssels, 2005; ten Dam & Blom, 2006).
- 137 The conditions for teacher learning include *psychological* factors (teacher cognition and motivation) and *organisational* factors (leadership, collaboration, staff relationships, communication, learning opportunities). The organisational factors are prerequisites for linking teacher and school development, with psychological factors as a mediating influence (Geijssels et al., 2009; Kwakman, 2003).
- 138 Participation in professional communities can be linked to improvement and continuous teacher development, within a cooperative school climate and evaluation/feedback mechanisms (Imants, Slegers & Witziers, 2001; OECD, 2009). *Schools as learning communities*, which actively engage teachers and pupils in self-directed learning, have been highlighted as favourable conditions for teachers' development. The '*professional learning community*' model entails *reflective inquiry*, with *collective learning and responsibility* (Bolam et al., 2005; Supovitz, 2002; Vescio, Ross & Adams, 2008).
- 139 *School leadership* plays a key role in mediating collective responsibility; in some countries, schools maintain a record of the continuing professional learning undertaken by each teacher, as a basis for the planning of individual and school development. In the main, policy and practice conditions across Europe seem to suggest that teachers' *collaborative learning* within a school, across different schools or even different countries, could be promoted further - as well as the potential of project work, classroom research, mentoring, or shadowing. The great challenge is to balance the increased focus on individualisation with the greater need for collaboration and team work among teachers.
- 140 The provision of continuing professional development activities for teachers - like the provision of learning opportunities for pupils - should respond to the needs of each individual teacher and cover a wide variety of content and delivery in activities (interactive, informal/non-formal), which:
- reflect the different stages in a teacher's professional development,
 - reflect different levels of competence, and
 - take into account outcomes of research on teacher learning.

⁴ See ENTEP website (<http://entep.unibuc.eu/>).

141 A wide variety of formal and non-formal CPD activities would create the space for professional development plans to be planned and worked out locally, at school level, or regionally. One possibility is for the budget for national provision to be differentiated to cover for:

- individual needs (e.g. through individual vouchers),
- local needs (i.e. through school budgets), and
- national priorities.

142 At each stage of their careers, teachers need to have complete and accurate information about the many different possibilities for developing as professionals, both within and outside the school – which in the long run will contribute to a professional re-empowerment and thus strengthen the image of teachers as well.

In Estonia (Annex 3.4), induction represents a successful policy, in that it promotes the development of new teachers' competences at the critical stage of professional socialisation in the school context; it provides structured support and feedback by Teacher Educators, as well as opportunities for dialogue with peers and expert teachers in professional learning communities. The induction programme is also integrated in an overall competence-based approach to teaching and learning in education and training policies, based on the professional standards for teachers, as reflective lifelong learners.

In the Netherlands, the responsibility for teacher quality and professional development is clearly shared between government, school boards and individual teachers, against the background of the professional standards and register for teachers, with a leading role for unions and professional associations. Individual professional development records for each teacher are compulsory elements of the school's human resources budget plan; a bursary system and salary scales aim to promote the attainment of further qualifications.

Conditions for policy success

143 A number of *key principles* should underpin the planning and development of the provision of CPD opportunities for teacher competence development. A significant proportion of teachers think that professional development does not meet their needs and interests, in terms of quantity, quality and content, as the TALIS survey points out (OECD, 2009). Therefore, *provision* should:

- take into account the perspective of the specific school context and needs, as well as national demands, making a connection between the two – e.g. linking the needs of school development and curriculum development;
- be based on a vision, and an analysis of the local situation (e.g. the different stages of development of schools, and of individual teachers);
- be integrated into the wider school development plan;
- be negotiated, so that it connects school development with individual professional development;

- define priorities which are connected to a wider competence framework;
- be connected to teacher appraisal and feedback, to identify development needs and related CPD plans;
- consider CPD needs throughout the different stages of teachers' careers especially as they represent an ageing profession, and their skills and competences require constant updating, to keep up with social changes and expectations (European Commission, 2012).

144 *Conditions for success* of CPD provision include:

- politicians with a vision and with courage for change,
- strong School Leadership with a vision and trust in change,
- a focus on the impact of CPD on schools and pupils,
- a focus on active sharing with colleagues,
- room for experiential learning (freedom to experiment and freedom to learn from failure),
- the need for coordination and dialogue between stakeholders with different roles, possibly by means of a (semi-autonomous) agency, with the aim of safeguarding the conditions for success (quality assurance, overview of needs/demands, competence frameworks).

145 Developing provision for teacher competence development needs to strike the right balance in each national context between:

- provisions driven by supply, and provision driven by needs or demand from teachers;
- provision designed from the perspective of the individual teacher, and provision designed from the perspective of the school or educational authority, making the links between the two levels explicit for quality learning;
- national standards/frameworks, and the freedom to develop local solutions.

146 It is also important that teachers feel ownership of the processes for acquiring and developing competences.

147 *Quality assurance systems*, and value for money evaluations, should ensure that provision remains relevant to teachers' needs. An important question should be: 'how did this professional development impact upon students' learning and attainment?' This seems to suggest that such assessments could take place at the school or local/regional level.

148 Policies to ensure that the teaching workforce has the necessary competences cannot be designed in isolation from policies on school curricula, school assessment/ evaluation, and initial teacher education curricula; they require a *sound understanding about the knowledge base* underlying each competence. On a system level, such policies will be most effective if founded upon *sustained communication* between all those who deliver any form of teacher education or professional development, with *clarity about roles and responsibilities*. Logically, responsibility for assessing teachers' competence and for developing competence further needs to be shared between the individual teacher and the wider system.

6 Conclusions

- 149 In order to raise pupil attainment, Member States need their teachers to be able to deploy appropriately all the competences necessary to be effective in the classroom and school.
- 150 Teaching requires complex and dynamic combinations of knowledge, skills, understanding, values and attitudes; their acquisition and development is a career-long endeavour that requires a reflexive, purposeful practice and high quality feedback.
- 151 There are as many different kinds of teaching as there are teachers; each of these has the potential to be of high quality; some important aspects of teachers' professional work cannot be easily defined or assessed. Diversity in teaching can be valued as a strength.
- 152 Effective systems for the education of new teachers and the professional development of serving teachers rely on a shared understanding of the competences that teachers need to deploy in different levels of schooling, or at different stages in their career. Such a profile or framework of teacher competences can also be used to improve the effectiveness of the recruitment and selection of candidates for teaching posts and assist teachers in planning their professional development.
- 153 Teacher Education policies cannot be designed in isolation from policies on school curricula, assessment and evaluation. This text has highlighted the many different ways in which competence frameworks can be used to improve the quality of teaching and therefore the attainment of learners. It has also identified the key factors in the successful development and implementation of a competences approach to teaching. The process of bringing stakeholders together to discuss these issues can, in itself, be beneficial, especially if it leads to an increased sense of ownership of the results and a commitment to their implementation.
- 154 The ultimate purpose of systems of teacher education and professional development must be to support learning by students. Enabling all teachers to develop their competences means stimulating teachers' engagement in career-long learning, assessing the development of teachers' competences, and providing appropriate and relevant learning opportunities for all teachers.
- 155 Professional development is increasingly understood to comprise a wide range of formal, non-formal and in-formal learning activities, often taking place within the school or another community of practice. CPD provision should respond to each teacher's specific needs. School leaders play a key role in encouraging and advising teachers about appropriate professional learning.
- 156 Teacher competence frameworks, when devised and implemented in ways that are relevant to each national context and consistent with other educational policies, can be powerful tools to improve educational quality.

Annex 1

aspects of competence

The following aspects of teacher competences encompass perspectives from policy and research discussed in previous chapters (research insights in chapter 1; policy insights in chapters 2-5).

They can be useful references for a shared discourse between stakeholders and experts, as well as a starting point for further developments in international arenas of educational policy and practice - as suggested in the Commission Staff Working Document 'Supporting the Teaching Professions for Better Learning Outcomes' (European Commission, 2012c) .

As argued in previous chapters, the breaking down of teacher competences – which are essentially dynamic and holistic - into separate areas and components only serves the analytical purpose of understanding the implications and assumptions that underlies them. Indeed, cross-cultural views of teaching and learning seem to highlight the need for a systemic, context-bound perspective of teachers' competence development and expertise (Schratz & Wieser, 2002).

Knowledge and understanding	Subject matter knowledge
	Pedagogical Content Knowledge (PCK), implying deep knowledge about content and structure of subject matter: - knowledge of tasks, learning contexts and objectives - knowledge of students' prior knowledge and recurrent, subject-specific learning difficulties - strategic knowledge of instructional methods and curricular materials
	Pedagogical knowledge (knowledge of teaching and learning processes)
	Curricular knowledge (knowledge of subject curricula – e.g. the planned and guided learning of subject-specific contents)
	Educational sciences foundations (intercultural, historical, philosophical, psychological, sociological knowledge)
	Contextual, institutional, organizational aspects of educational policies
	Issues of inclusion and diversity
	Effective use of technologies in learning
	Developmental psychology
	Group processes and dynamics, learning theories, motivational issues
	Evaluation and assessment processes and methods

S k i l l s	Planning, managing and coordinating teaching
	Using teaching materials and technologies
	Managing students and groups
	Monitoring, adapting and assessing teaching/learning objectives and processes
	Collecting, analysing, interpreting evidence and data (school learning outcomes, external assessments results) for professional decisions and teaching/learning improvement
	Using, developing and creating research knowledge to inform practices
	Collaborating with colleagues, parents and social services
	Negotiation skills (social and political interactions with multiple educational stakeholders, actors and contexts)
	Reflective, metacognitive, interpersonal skills for learning individually and in professional communities
	Adapting to educational contexts characterised by multi-level dynamics with cross-influences (from the macro level of government policies to the meso level of school contexts, and the micro level of classroom and student dynamics)
D i s p o s i t i o n s: b e l i e f s, a t t i t u d e s, v a l u e s, c o m m i t m e n t	Epistemological awareness (issues concerning features and historical development of subject area and its status, as related to other subject areas)
	Teaching skills through content
	Transferable skills
	Dispositions to change, flexibility, ongoing learning and professional improvement, including study and research
	Commitment to promoting the learning of all students
	Dispositions to promote students' democratic attitudes and practices, as European citizens (including appreciation of diversity and multiculturalism)
	Critical attitudes to one's own teaching (examining, discussing, questioning practices)
	Dispositions to team-working, collaboration and networking
	Sense of self-efficacy

The competences of teachers: perspectives from research and policy (Darling-Hammond & Bransford, 2005; Feiman-Nemser, 2001, 2008; Geijsel et al. 2009; González & Wagenaar, 2005; Hagger & McIntyre, 2006; Hatano & Oura, 2003; Kelly & Grenfell, 2004; Krauss et al., 2008; Mishra & Koehler, 2006; Williamson McDiarmid & Clevenger-Bright, 2008)

Annex 2

References

- Anderson, L.W. (2004), *Increasing Teacher Effectiveness*. (2nd edition) Paris: UNESCO, IIEP.
- Anderson, J.R., Greeno, J.G., Reder, L.M. & Simon, H.A. (2000). Perspectives on learning, thinking, and activity. *Educational Researcher*, 29, 11-13.
- Apple, M. W. (2005). Education, markets, and an audit culture. *Critical Quarterly*, 47: 11-29.
- Ball, D. L. (2003). *Mathematics in the 21st century: What mathematics knowledge is needed for teaching mathematics?* Washington D.C.: U.S. Department of Education.
- Barber, M. & Mourshed, M. (2007). *How the World's Best Performing Schools Come Out on Top*. McKinsey report.
- Bastian, J. & Helsper, W. (2000). Professionalisierung im Lehrberuf – Bilanzierung und Perspektiven. In J. Bastian, W. Helsper, S. Reh, S. & C. Schelle (Eds), *Professionalisierung im Lehrberuf. Von der Kritik der Lehrerrolle zur pädagogischen Professionalität* (167-192). Leske & Budrich.
- Bauer, K.-O. (2000). Konzepte pädagogischer Professionalität und ihre Bedeutung für die Lehrerausbildung. In J. Bastian, W. Helsper & C. Schelle, C. (Eds), *Professionalisierung im Lehrberuf. Von der Kritik der Lehrerrolle zur pädagogischen Professionalität* (55-72). Leske & Budrich.
- Berliner, D.C. (1987). In pursuit of the expert pedagogue. *Educational Researcher*, 15 (7), 5-13.
- Biesta, G. (2009). Values and ideals in teachers' professional judgement. In S. Gewirtz, P. Mahony, I. Hextall & A. Cribb (eds.), *Changing teacher professionalism*. London: Routledge.
- Biesta, G. (2010). *Good education in an age of measurement: Ethics, politics, democracy*. Boulder, Co: Paradigm Publishers, 2010.
- Biesta, G. (2011). Disciplines and theory in the academic study of education: A Comparative Analysis of the Anglo-American and Continental Construction of the Field. *Pedagogy, Culture and Society*, 19 (2), 175-192.
- Bolam, R., McMahon, A., Stoll, L., Thomas, S., Wallace, M., Greenwood, A., Hawkey, K., Ingram, M., Atkinson, A. & Smith, M. (2005). *Creating and sustaining effective professional learning communities*. Research Report 637. London: DfES and University of Bristol.
- Caena, F. & Margiotta, U. (2008). European Teacher Education: a fractal perspective tackling complexity. *European Educational Research Journal*, 9 (3), 317-331.
- Cochran-Smith, M. & Lytle, S. L. (1993) *Inside Out: Teacher Research and Knowledge*. New York: Teachers College.
- Cochran-Smith, M. (2006). *Policy, Practice, and Politics in Teacher Education*. Thousand Oaks, CA: Corwin Press.
- Cochran-Smith, M. & Lytle, S. L. (Eds.) (2009). *Inquiry as Stance. Practitioner Research for the Next Generation*. New York: Teacher College Press.
- Conway, P.F., Murphy, R., Rath, A. & Hall, K. (2009). *Learning to Teach and its Implications for the Continuum of Teacher Education: A Nine-Country Cross-National Study*. Report Commissioned by the Teaching Council. University College Cork and Teaching Council of Ireland.
- Council of Europe (2008). *White Paper of Intercultural Dialogue: Living together as equals in Dignity*. Strasbourg: Council of Europe .

- Dam, G. ten & Blom, S. (2006). Learning through participation. The potential of school-based teacher education for developing a professional identity. *Teaching and Teacher Education*, 22, 647-660.
- Davis, B. & Sumara, D.J. (2000). Curriculum forms: on the assumed shapes of knowing and knowledge. *Journal of Curriculum Studies*, 32 (6), 821-45.
- Darling-Hammond, L. (2000) (Ed.). *Studies of excellence in teacher education*. Washington DC: American Association of Colleges for Teacher Education.
- Darling-Hammond, L. (2006). Constructing 21st-Century Teacher Education. *Journal of Teacher Education*, 57 (3), 300-314.
- Darling-Hammond, L. & Bransford, J. (Eds.) (2005). Preparing teachers for a changing world. Report of the Committee on Teacher Education of the National Academy of Education. San Francisco: Jossey-Bass.
- Davis, B. & Sumara, D.J. (2000) Curriculum Forms: on the assumed shapes of knowing and knowledge. *Journal of Curriculum Studies*, 32(6), 821-845.
- Deakin Crick, R. (2008). Pedagogy for citizenship. In F. Oser & W. Veugelers (Eds.), *Getting involved: Global citizenship development and sources of moral values* (31-55). Rotterdam: Sense Publishers.
- Donaldson, G. (2010). *Teaching Scotland's Future - Report of a review of teacher education in Scotland*. Edinburgh: Scottish Government. <http://scotland.gov.uk/Resource/Doc/337626/0110852.pdf>
- Engestrom, Y. (1999). Activity theory and individual and social transformation. In Engestrom, Y. Miettinen, R. & Punamaki, R.-J. (Eds.). *Perspectives on activity theory*. Cambridge: Cambridge University Press.
- European Commission (2007). Communication from the Commission to the European Parliament and Council: Improving the Quality of Teacher Education. COM (2007) 392 final. Brussels, 3.8.2007.
- European Commission (2010). Developing coherent and system-wide induction programmes for beginning teachers: a handbook for policymakers. European Commission Staff Working Document 538 final. Brussels.
- European Commission (2011a). *Literature review. Teachers' core competences: requirements and development*. Author: Francesca Caena. Brussels, April 2011.
- European Commission (2011b). *Literature review: Quality in teachers' continuing professional development*. Author: Francesca Caena. Brussels, June 2011.
- European Commission (2012a) 'Rethinking Education: Investing in skills for better socio-economic outcomes' COM(2012) 669/3
- European Commission (2012b). Assessment of Key Competences in initial education and training: Policy Guidance. Strasbourg, 20.11.2012. SWD (2012) 371 final.
- European Commission (2012c). *Supporting the Teaching Professions for Better Learning Outcomes*. Strasbourg, 20.11.2012. SWD (2012) 374 final.
- ETUCE (European Trade Union Committee for Education) (2008). *Teacher Education in Europe. An ETUCE Policy Paper*. Brussels: ETUCE.
- European Union (2006) Key Competences for Lifelong Learning, a European Reference Framework. Brussels, 2006.
- European Union (2007) Conclusions of the Council and of the Representatives of the Governments of the Member States, meeting within the Council of 15 November 2007, on improving the quality of teacher education (Official Journal C 300/6, 12.12.2007).
- European Union (2008). Conclusions of the Council and of the Representatives of the Governments of the Member states, meeting within the Council of 21 November 2008 on preparing young people for the 21st century: an agenda for European cooperation on schools (Official Journal 2008/C 319/08, 13.12.2008)
- European Union (2009). Council Conclusions of 26 November 2009 on the professional development of teachers and school leaders (Official Journal 2009/C 302/04, 12.12.2009).

- Feiman-Nemser, S. (2008). Teacher Learning. How do Teachers learn to teach? In Cochran-Smith, M, Feiman-Nemser, S., McIntyre, D. (Eds.). *Handbook of research on Teacher Education. Enduring Questions in Changing Contexts*. New York/Abingdon: Routledge/ Taylor & Francis.
- Fenstermacher, G. D., & Richardson, V. (2005). On making determinations of quality in teaching. *Teachers College Record*, 107(1), 186-215.
- Feiman-Nemser, S. (2001). From preparation to practice: designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103 (6), 1013-1055.
- Fullan, M (2003). *Change Forces with a Vengeance*. London/New York: Routledge/ Taylor & Francis.
- Furlong, J., Barton, L., Miles, S., Whiting, C. & Whitty, G. (2000). *Teacher Education in Transition*. Buckingham: Open University Press.
- Geijsel, F., Slegers, P., Stoel, R. & Krüger, M. (2009). The Effect of Teacher Psychological, School Organizational and Leadership Factors on Teachers' Professional Learning in Dutch Schools. *The Elementary School Journal*, 109(4), 406-427.
- Giddens, A. (1984). *The Constitution of Society. Outline of the theory of structuration*. Berkeley: University of California Press.
- Giddens, A. (1990). *The Consequences of Modernity*. Cambridge: Polity.
- Gonzalez, J. & Wagenaar, R. (Eds.) (2005). *Tuning Educational Structures in Europe II. Universities' contribution to the Bologna Process*. University of Deusto & University of Groningen. <http://tuning.unideusto.org/tuningeu/>
- GTCE (General Teaching Council for England) (December 2005) 'Continuing Professional Development'.
- Hagger, H. & McIntyre, D. (2006). *Learning teaching from teachers. Realizing the potential of school-based teacher education*. Maidenhead: Open University Press.
- Hansen, D.T. (2008). Values and purpose in teacher education. In Cochran-Smith, M., Feiman-Nemser, S., McIntyre, D. (Eds.). *Handbook of Research on Teacher Education. Enduring questions in changing contexts*. New York/Abingdon: Routledge/Taylor & Francis.
- Hargreaves, A., Earl, L., Moore, S. & Maning, S. (2001). *Learning to Change: Teaching Beyond Subjects and Standards*. San Francisco: Jossey Bass.
- Hatano, G. & Oura, Y. (2003) Commentary: reconceptualising school learning using insight from expertise research. *Educational Researcher*, 32(8), 26-29.
- Hay McBer (2000). *Research into teacher effectiveness: A model of teacher effectiveness. Research report No. 216*. Norwich: The Crown Copyright Unit.
- Hill, H., Rowan, B. & Ball, D. (2005). Effects of teachers' mathematical knowledge for teaching on student achievement. *American Educational Research Journal*, 42 (2), 371-406.
- Imants, J., Slegers, P. & Witziers, B. (2001). The tension between organisational sub-structures in secondary schools and educational reform. *School Leadership and Management*, 21, 289-308.
- Ingvarson, L. (1998). Professional standards: a challenge for the AATE? *English in Australia*, 122: 31-44.
- Kelly, M. & Grenfell, M. (2004). *European Profile for Language Teacher Education. A Frame of Reference*. University of Southampton, UK.
- Kennedy, M. (1999). The role of pre-service teacher education. In Darling-Hammond, L. & Sykes, G. (Eds.). *Teaching as the learning profession: handbook of teaching and policy*. San Francisco: Jossey-Bass.
- Kleinhenz, E. & Ingvarson, L. (2007). *Standards for Teaching. Theoretical Underpinnings and Applications*. New Zealand Teachers Council. www.teacherscouncil.govt.nz/communication/publications/research0012.pdf
- Koster, B. and Dengerink, J. J.(2008). Professional standards for teacher educators: how to deal with complexity, ownership and function. Experiences from the Netherlands. *European Journal of Teacher Education*, 31:2, 135-149.

- Krauss, S., Brunner, M., Kunter, M., Baumert, J., Blum, W., Neubrand, M. & Jordan, A. (2008). Pedagogical Content Knowledge and Content Knowledge of Secondary Mathematics Teachers. *Journal of Educational Psychology*, 100(3), 716-725.
- Kwakman, K. (2003). Factors affecting teachers' participation in professional learning activities. *Teaching and Teacher Education*, 19, 149-170.
- Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- McLaughlin, M. & Talbert, J. (2001). *Professional communities and the work of high-school teaching*. Chicago: University of Chicago Press.
- Mahony, P. & Hextall, I. (2000). *Reconstructing Teaching*. London: Routledge.
- Menter, I., Hulme, M., Elliot, D. & Lewin, J. (2010). *Literature Review on Teacher Education in the 21st Century*. Edinburgh: Educational Analytical Services, Scottish Government Social Research
- Mishra, P. & Koehler, M.J. (2006). Technological Pedagogical Content Knowledge: A new Framework for teacher knowledge. *Teachers College Record*, 108 (6), 1017-1054.
- OECD (2005). *Teachers Matter: Attracting, Developing and Retaining Effective Teachers*. Paris: OECD publications. <http://www.oecd.org/edu/teacherpolicy>
- OECD (2009). *Creating Effective Teaching and Learning Environments. First Results from TALIS*. Paris: OECD Publications <http://www.oecd.org/dataoecd/17/51/43023606.pdf>
- OECD (2011) *Preparing Teachers and Developing School Leaders for 21st Century - Lessons from around the world (Background Report for the International Summit on the Teaching Profession)*
- Olsen, M., Codd, J. & O'Neill, A.M. (2004). *Education Policy: Globalization, Citizenship and Democracy*. London, Thousand Oaks, New Delhi: Sage Publications.
- Paquay, L. & Wagner, M.-C. (2001). Compétences professionnelles privilégiées dans les stages et en vidéo-formation. In L., Paquay, M., Altet, E., Charlier & Ph., Perrenoud (Eds). *Former des enseignants professionnels. Quelles stratégies? Quelles compétences?* Bruxelles : De Boeck.
- Pring, P. (2004). Teaching and the good teacher. In Inglis, F. (Ed.) *Education and the Good Society*. (75-87). London: Palgrave Macmillan.
- Putnam, R.T. & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher*, 2 (1), 4-15.
- Prengel, A. (1995). *Pädagogik der Vielfalt* (2nd ed.). Opladen: Leske & Budrich.
- Pyke, C. L. & Lynch, S. (2005). Mathematics and Science Teachers' Preparation for National Board of Professional Teaching Standards Certification. *School Science and Mathematics*, 105: 25-35.
- Reh, S. (2004). Abschied von der Profession, von Professionalität oder vom Professionellen? Theorien und Forschungen zur Lehrerprofessionalität. *Zeitschrift für Pädagogik*, 47 (3), 358-72.
- Rivkin, S.G., Hanushek, E.A. & Kain, J.F. (2005). Teachers, Schools, and Academic Achievement. *Econometrica*, 73 (2), 417-458. <http://edpro.stanford.edu/Hanushek/admin/pages/files/uploads/teachers.econometrica.pdf>
- Rychen, D.S. & Salganik, L.H. (2003). *Key Competencies for a successful life and a well-functioning society*. Göttingen: Hogrefe & Huber
- Scheerens, J. (2007). Conceptual framework for the development of the PISA 2009 context questionnaires and thematic reports. *OECD, paper for the PISA Governing Board*.
- Schatz, M. & Wieser, I. (2002). Mit Unsicherheiten souverän umgehen lernen. Zielsetzungen und Realisierungsversuche einer professionalisierenden lehrerInnenbildung. In H. Brunner, E. Mayr, M. Schatz & I. Wieser (Eds). *Lehrerinnen und Lehrerbildung braucht Qualität. Und wie!* (13-43). Innsbruck: StudienVerlag.
- Schatz, M., Schrittemser, I., Forthuber, P., Pahr, G., Paseka, A. & Seel, A. (2007). Domänen von Lehrer/innen/professionalität: Rahmen einer kompetenzorientierten Lehrer/innen/

- bildung. In C., Kraler & M., Schratz (Eds). *Wissen Erwerben, Kompetenz Entwickeln*. Münster: Waxmann Verlag.
- Senge, P. M. (1996). *Die fünfte Disziplin. Kunst und Praxis der lernenden Organisation*. Stuttgart: Klett-Cotta.
- Sergiovanni, T. (2000). *The Lifeworld of Leadership*. San Francisco: Jossey Bass.
- Shulman, L.S. (1987). *Knowledge and Teaching: foundations of the new reform*. Harvard Educational Review, 57 (1), 1-22.
- Sleegers, P., Bolhuis, S. and Geijsel, F. (2005). School improvement within a knowledge economy: Fostering professional learning from a multidimensional perspective. In N. Bascia, A. Cumming, A. Datnow, K. Leithwood and D. Livingstone (Eds). *International Handbook of Educational Policy*, 527-543. Dordrecht: Kluwer Academic Publishers.
- Sockett, H. (2008). The moral and epistemic purposes of teacher education. In Cochran-Smith, M., Feiman-Nemser, S., Mc Intyre, D. (Eds.). *Handbook of Research on Teacher Education. Enduring questions in changing contexts*. New York/Abingdon: Routledge/ Taylor & Francis.
- Supovitz, J.A. (2002). Developing communities of instructional practice. *Teachers College Record*, 104 (2), 127-146.
- Sykes, G., & Plastrik, P. (1993). Standard setting as educational reform. (Trends and Issues Paper no. 8). Washington, DC: ERIC Clearinghouse on Teacher Education and American Association of Colleges for Teacher Education. ED 358 068
- Tatto, M.T. (1996). Examining Values and Beliefs about Teaching Diverse Students: Understanding the Challenges for Teacher Education. *Educational Evaluation and Policy Analysis*, 18 (2), 155-180.
- Taylor, C. & Nolen, S. (2004). *Classroom assessment*. Upper Saddle River, NJ: Prentice.
- Terhart, E. & Klieme, E. (2005). Kooperation im Lehrerberuf – Forschungsprobleme und Gestaltungsaufgabe. Zur Einführung in den Thementeil. *Zeitschrift für Pädagogik*, 48 (2), 163-166.
- Vescio, V., Ross, D. & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24, 80-91.
- Vogt, F. & Rogalla, M. (2009). Developing Adaptive Teaching Competency through coaching. *Teaching and Teacher Education*, 25 (8), 1051-1060.
- Wenger, E. (1998). *Communities of practice: learning, meaning and identity*. Cambridge: Cambridge University Press.
- Williamson McDiarmid, G. & Clevenger-Bright, M. (2008). Rethinking Teacher Capacity. In Cochran-Smith, M., Feiman-Nemser, S. & Mc Intyre, D. (Eds). *Handbook of Research on Teacher Education. Enduring questions in changing contexts*. New York/Abingdon: Routledge/Taylor & Francis.
- Yinger, R.J. & Hendricks-Lee, M.S. (2000). The language of standards and teacher education reform. *Educational Policy*, 14(1), 94-106. <http://epx.sagepub.com/content/14/1/94>
- Zeichner, K. & Conklin, H.G. (2008). Teacher Education programs as sites for teacher preparation. In Cochran-Smith, M., Feiman-Nemser, S. & Mc Intyre, D. (Eds). *Handbook of Research on Teacher Education. Enduring questions in changing contexts*. New York/Abingdon: Routledge/Taylor & Francis.

Annex 3 Policy examples

1. Belgium (Flanders)

In Flanders there are two sets of competence frameworks:

- a career profile: a competence framework for experienced teachers, who should strive towards these competences throughout their career
- basic competences: a competence framework which describes what a beginning teacher should be able to know and to do. These competences must be attained at the end of initial teacher education.

Both were introduced by law in 1996, and reviewed in 2007, as a result of the new decree on teacher education of 2006. The educational council is currently reviewing the frameworks again (2013), taking into consideration future developments in Flemish education (e.g. reform of secondary education, reform of the teaching profession, etc.).

Both the career profile and the basic competences are structured by the same set of *10 job components/ specifications*:

1. the teacher as guide in learning and development processes,
2. the teacher as educator,
3. the teacher as subject matter specialist,
4. the teacher as organiser,
5. the teacher as innovator and researcher,
6. the teacher as partner of parents,
7. the teacher as member of a school team,
8. the teacher as partner of external parties,
9. the teacher as member of the educational community,
10. the teacher as culture participant.

The main *purpose* of these competence frameworks is to provide a guideline for professional development, to enhance quality, to create a common language, as well as to stimulate teachers' responsibility and awareness of their own professional development.

2. Ireland

The Teaching Council (established in 2006 as the professional standards body) sees the *development of a teacher competency framework for all career phases* as key to building a stronger teacher education continuum in Ireland. The development of teacher competences has evolved over a number of years in key stages. The Teaching Council Act, 2001 provides the legislative framework. The stages in developing teacher competencies included the following aspects:

1. *Code of Professional Conduct*

The standards of teaching, knowledge, skill and competence, first published in 2007, were set out under five headings, as representative of roles, responsibilities and relationships central to the practice of teaching:

- the teacher and student,
- the teacher and parents,
- the teacher and curriculum,
- the teacher as learner,
- the teacher, the State, the community and the school.

2. *Review and Professional Accreditation of initial teacher education Programmes.*

The Teaching Council set about developing its Strategy for the Review and Professional Accreditation of initial teacher education Programmes in 2007, encompassing the review process and accreditation criteria (programme inputs, processes and outcomes). The draft strategy underwent a consultation process started in 2008, with teacher education providers' recommendations about learning outcomes that should be general, limited in number, flexible and accessible. The need for a distinction between programme level outcomes (competences) and student learning outcomes (achievable, measurable and assessable, mostly at module level) was also recommended, with the need for alignment with academic accreditation requirements.

3. *Criteria and Guidelines for initial teacher education Providers*

In 2010, the Council reviewed the criteria included in the draft Strategy, extracting them into a separate document. Following up feedback received in Stage 2, learning outcomes were revised in wording and mapped onto Level 8 of the National Framework of Qualifications (NFQ) strands of knowledge, skill and competence.

4. *Induction and Probation*

The Teaching Council then focused on the development of competences for the career entry stage: the Standards for Full Registration, included in the Career Entry Professional Programme consultation document, drafted in 2012. Feedback from consultations has led to new proposals for induction and probation; a final document scheduled for May 2013, on the pilot phase process of 2013/15, proposes high level standards for full registration, accompanied by more detailed standards developed on the basis of feedback from the profession.

Example of revised wording of learning outcomes for initial teacher education (2010)

Revised learning outcomes are re-arranged and broken down into three broad headings, in line with the NQF:

- 3.1. Knowledge (Knowledge-Breadth and Knowledge-Kind)
- 3.2. Skill (Know-How, Skill-Range and Know-How, Skill-Selectivity)
- 3.3. Competence (Competence-Context and Competence-Role; Competence-Learning to Learn; Competence-insight).

This is an example of revised wording for the aspect 'Communication and relationship-building', present in each of the three areas (Knowledge, Skill and Competence):

1. *The graduate will demonstrate knowledge and understanding of:*
 - the importance of teacher-pupil relationships in the teaching/learning process;
 - strategies for developing positive relationships and communicating effectively with pupils, parents, colleagues, the school principal, school management, co-professionals and the wider community;
 - the roles of stakeholders and the importance of engagement and cooperation with them, contributing to the characteristic spirit of the school and developing a positive environment for teaching and learning.
2. *The graduate will be able to:*
 - foster good relationships with and among pupils based on mutual respect and trust and meaningful interactions;
 - communicate effectively with pupils, parents, colleagues, the school principal, school management, co-professionals and the wider community by using appropriate skills, styles and systems to suit the given situation and setting;
 - enable children to resolve conflict;
 - understand and accommodate the concept of inclusion, equality and diversity;
 - articulate and represent students' interests, as appropriate.
3. *The graduate will be able to:*
 - act as advocate on behalf of learners, referring students for specialised educational support, as required, and participating in the provision of that support, as appropriate.
4. *The graduate will:*
 - actively participate in professional learning communities which engage in group reflection, learning and practice.

3. The Netherlands

The law regulating the quality of the teaching profession in the Netherlands (Education Professions Act 2006) prescribes that teachers have to meet competence requirements and that schools must facilitate teachers' continuing professional development. The first framework of teacher competences in the Netherlands was developed around 2004 and included in the 2006 Act. This framework defines the outcome requirements of initial teacher education and creates *a frame of reference for school boards' human resource policies, and for teachers' CPD activities*.

The Act provides that proposals for the revision of competence requirements are developed by the teaching profession every six years. In 2011 the revision process was started, based on a number of evaluations, which criticised the lack of priorities in the seven competences of the first framework. Teachers felt that teaching their subject area was the core of their professional identity and quality, while it was only one of seven competence framework areas. The proposed revision puts more emphasis on three key areas of teachers' daily work: subject expertise, teaching expertise and pedagogical expertise.

Upon invitation by the Ministry, the professional body for the teaching profession, the *Onderwijscoöperatie*, representing teacher unions and professional associations, has taken the lead in revising the competence framework. Proposals for revised requirements need to be approved by other stakeholders (i.e. organizations of school boards and parents). All teacher organizations and school boards have been actively engaged in the revision. This mirrors an increased awareness of the importance of teacher competences and CPD for educational quality. An important lesson from the framework revision is the need for more time to organise the engagement of all stakeholders, allowing for consultations within organizations. An ongoing formative evaluation of the implementation process with stakeholders is advisable and can in itself contribute to effectiveness.

Within Dutch teacher policies, *developing and maintaining teacher quality is seen as a responsibility of government, school boards and teachers*. In all policy measures a balance needs to be found between these three players, and their feeling of ownership, as this is seen as a vital condition for effective teacher policies in the Netherlands.

- As for *government*, the ministry of education defines the framework for teachers' professional development. The standards for teacher quality are defined by the 2006 Act. In the past two years, the Inspectorate looks more closely into the quality of human resource policies and of the teaching staff in a school as a whole.
- *school boards* have the responsibility of stimulating and facilitating the professional development of the teaching staff in their schools. They are provided with financial resources dedicated to human resource development, within a system of lump sum financing. Schools are expected to keep records of each teacher's professional development.
- *teachers* are expected to maintain their competences through professional development activities, which can take up 10% of their job time, according to collective working agreements. However, as there is no centralized control or

reward system, teachers depend on individual schools' management for support.

To reduce the dependence of teachers on their school boards, the ministry recently introduced a bursary system, with individual teachers' study grants for qualification courses at bachelor or master level. The bursary system covers the costs for study fees and replacement (up to half a day a week) for a maximum of three years. The annual budget is €40 million; since 2008, 26,000 teachers have applied. Different salary scales have been introduced to promote professional development and create career steps which, in many schools, are connected to master qualifications.

Following a recent policy paper, in the *Onderwijs-coöperatie*, teacher unions and professional associations have a leading role. To strengthen the responsibility and involvement of the profession in developing its members' competences, the task of this body is to set up a professional register for teachers - so far voluntary - based on development activities, for a minimum yearly amount of 40 hours.

4. Estonia

Teachers' competences have been a key issue in Estonian education policy in recent years. The competence expectations for teachers were first described in the Teachers' Professional Standard (2005) and in the Vocational Teachers' Professional Standard (2006). *Professional standards* have become the conceptual foundations of teacher education, used for compiling initial teacher training study programmes and organising the induction year, as well as teachers' continuing professional development.

The curricula for initial teacher education have been constantly updated on the basis of the professional standards. As of 1st September 2009, all higher education curricula include expected learning outcomes and take into consideration the acquisition and deployment of the knowledge and skills described in professional standards. Progress is being made in the recognition of prior learning and professional experience, as well.

The *induction process* for new teachers is a successful policy highlight: the purpose is to support new teachers in adapting to the school context, and promote professional skills development through continuous learning and analysis of practice, based on Teachers' Professional Standards. The focus of the Estonian induction model lies in the support by school mentors and university seminars; the mentor's role is to foster the new teacher's learning and development through dialogue and reflection, giving individual feedback.

University support seminars include group sessions guided by experienced teachers or teacher educators, providing group mentoring. New teachers come together four or five times a year to 1-2 seminar days (overall 80 hours) and discuss solutions to problems met during their first year of school employment. Topics include: management of group processes and relationships; classroom behaviour problem solving on different levels; cooperation and related factors; self-assertion attitudes and skills; verbal and non-verbal behaviour; self-analysis and self-assessment for personal development; motivation and feedback for a supportive learning environment; long-term planning and time management; assessment of learning outcomes.

Induction is formally concluded with the end of the support programme at university and a self-analysis report for further professional development, with the mentor's feedback. New teachers prepare individual development portfolios containing evidence of their work and self-analyses; there is no formal evaluation. Based on the mentor's report, the school leader states whether the new teacher has met professional standard requirements.

The Estonian Teachers' Professional Standard emphasizes the building of an attitude and understanding of the teacher as a reflective practitioner and a life-long learner. *The Estonian teacher is thus responsible for identifying and planning personal learning and professional development needs.* The new Schools Act establishes that a school's development plan must also include a plan for teachers' in-service training.

Competence-based teaching and learning is a new approach and a huge challenge for teachers, mentors and teacher educators. The main question is how to support and assess the acquisition of learners' competences; that is why the training and development of educational staff is critically important.

5. Sweden

Research shows that teachers play a crucial role for effective learning and learning outcomes. It is therefore important to give *opportunities for teachers to develop their professionalism*, and Sweden offers several possibilities along a teacher's career.

First, there are *four professional degrees* in Swedish initial teacher education (pre-school education, primary school education with three specialisations, subject education with two specialisations, and vocational education). For each there is a specific Degree Ordinance with three different areas: knowledge and understanding; competence and skills; judgement and approach.

Secondly, on 1 July 2011 *a system for registering teachers* came into force, which is compulsory, in the main; if a teacher is not registered (s)he can't teach, mark or get a post with conditional tenure. Before a new teacher can be registered (s)he has to complete an induction period at a school, with the support of a mentor. The principal will then have to assess the teacher as professionally suitable to be fully registered. The National Agency for Education is responsible for registering teachers and judging what qualifications teachers have. The agency has also prepared competence profiles (or standards) for a competent and suitable teacher, which could be used by mentors, principals and other stakeholders. A teacher, when no longer suitable for the profession, can't be registered; a disciplinary board decides about that.

Thirdly, *two different pathways* will soon be available in Sweden, with the possibility of state grants by the Government for some options. One is a more academic way to develop teacher professionalism, while the other is more practical. A teacher who has a licentiate degree (an intermediate degree between master and PhD) and has shown that (s)he is a well-qualified and suitable teacher along a minimum period of four years, can be appointed 'lecturer', while a teacher who has stood out as an excellent teacher in practice can be appointed 'first teacher'.

The main task for those teachers should still be teaching and tuition; it is essential for students' education and outcomes that good teachers want to stay in the classroom. However, the 'lecturers' and the 'first teachers' can have additional tasks, which should lead to further professional opportunities - mentoring, the responsibility for a special subject, or school development. The school organiser (in most cases the principal) is free to decide about the teachers' tasks and areas of responsibility; it is the school organiser who makes the appointments, but local organisers can apply for a state grant which must be used for teachers' salaries.