

BORDÓN

Revista de Pedagogía

NÚMERO MONOGRÁFICO / *SPECIAL ISSUE*

Formación inicial de maestros /
*Pre-primary and primary teacher training
and education*

Miquel Martínez
(editor invitado / *guest editor*)



Volumen 68
Número, 2
2016

SOCIEDAD ESPAÑOLA DE PEDAGOGÍA

EDUCATING PROFESSIONAL TEACHERS THROUGH THE MASTER'S LEVEL TEACHER EDUCATION PROGRAMME IN FINLAND

Formando la profesionalidad del docente a través del Programa de Máster de Formación del Profesorado en Finlandia

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DOI: 10.13042/Bordon.2016.68204

Fecha de recepción: 05/10/2015 • Fecha de aceptación: 26/01/2016

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INTRODUCTION. Teacher professionalism is discussed in contexts of the international research literature and the Finnish education system. Important issues such as the PISA test are useful to analyse the Finnish education system from an education policy perspective. **METHOD.** A short general overview of teacher professionalism research is presented and the Finnish educational context and the role of teachers are discussed. Teacher education—that is, how student teachers become professionals in curriculum design and instructional and assessment methodologies—is also analysed. **RESULTS.** Teacher professionalism in the Finnish context means a versatile knowledge base, collaboration and networking skills, competence for life-long-learning and, moreover, an ability to use these potentials innovatively in order to act effectively. Several reasons explain how teacher professionalism is in Finland: The reforms made in the education system in the 1980s; the way Finnish teachers are prepared to have a broad view of the competences that are needed to learn in the 21st century; and a culture of trust regarding the way teachers ensure the learning process of their students. **DISCUSSION.** Finnish teachers plan and implement teaching and assess their own teaching, students' learning and learning outcomes, collaborate with other teachers and society and, additionally, continuously develop their teaching profession within the whole school context. Teachers have a big responsibility concerning the way their students learn, but at the same time teachers can develop their own autonomy in designing the curriculum, using instructional strategies and assessment methods.

Keywords: *Teacher education, Professional teacher, Effective teacher, Teacher's competence.*

Introduction

Finnish education has received global attention since the release of the first *Programme for International Student Assessment* (PISA) results in 2002 due to Finnish students' high scores in reading, mathematics and scientific literacy (OECD, 2007, 2010). These high scores and the low performance variation in the results have been important outcomes of Finnish education policy. The results are even more interesting because the number of school days, as well as lesson hours, in Finland are among the lowest in the Organization for Economic Cooperation and Development (OECD) countries. In Finland, there is not a tradition of private tutoring or evening schools, as there is in several Asian countries; Finnish parents trust their schools and teachers and do not pay for extra educational services. Quality, equality, decentralisation and teachers' professionalism have been identified as characteristics of the Finnish education system that have led to the country's PISA success (Sahlberg, 2011; Burris, 2012).

Recently, Finnish education has again received attention, this time because of Finnish students' decreasing performance and negative attitudes to learning (OECD, 2014a). Finnish students ranked twelfth in the PISA 2012 mathematical literacy assessment, which is ten positions lower than they ranked in the previous assessment. Based on the PISA 2012 affective domain data, Kupari *et al.* (2013) reported an increase in negative perceptions of school climate and school satisfaction. According to the TALIS 2013 (OECD, 2014b), Finnish teachers feel that initial teacher training does not adequately encourage and prepare teachers for collaboration between the students' home and school, multi-professional cooperation, controlling disruptive behaviour in the classroom or managing challenging students' needs (Taajamo, Puhakka & Välijärvi, 2014).

The aim of this paper is to discuss teacher professionalism and its meaning in the context of

the Finnish education system. Firstly, a short overview of the research on teacher professionalism/effectiveness is introduced. Secondly, the successes and challenges of the Finnish educational context and the role of teachers is addressed, and thirdly, secondary teacher education at the University of Helsinki is analysed as an example of a teacher training programme. Finally, in the closing chapter the successes and challenges of teacher education is discussed.

Teacher professionalism

Teacher professionalism is a complex concept, and it has been defined in several ways. In addition, several different terms such as "effective", "competent", "expert", "quality", "ideal" or "respected" have been used to describe a professional teacher (Cruickshank & Haefele, 2001; Stronge & Hindman, 2003). A teacher's professionalism/effectiveness is typically approached by analysing (i) the knowledge base of the professional teacher (input approach), (ii) the process or the interaction that occurs in the classroom between the teacher and students (process approach) or (iii) the outcomes of the teaching and learning process such as students' learning outcomes measured by national tests or graduation rates (output approach) (Goe, Bell & Little, 2008). According to the input approach, a professional teacher is supposed to have a versatile knowledge base, allowing him or her to act as an autonomous professional. The term "knowledge" is broadly interpreted in this context and is close to "competence" or "skill". This knowledge base supports the broad planning, organising and evaluation of a teachers' own teaching, as well as student learning and learning outcomes. Broad planning incorporates everything from the planning of the local curriculum to the planning of a single lesson.

Teacher professionalism not only refers only to an individual teacher's competence but also to the status of teachers in a given society. It depends on school-level factors and cultural and

education policy factors, in addition to the individual characteristics of a teacher such as his or her knowledge base, teaching philosophy and interaction and collaboration skills (Müller, Norrie, Hernández & Goodson, 2010). For example, the nature of leadership, collaboration culture, structure of networks and school-society-family partnerships are important school-level factors. Cultural and education policy factors include the state-level education context, for example, whether the country is following a policy of accountability or, alternatively, trusts teachers without relying on heavy inspection and testing.

Shulman's model of teacher knowledge

The description of the teacher's knowledge base is the starting point for characterising a professional teacher. A well-known approach to describing the teacher's knowledge base is Shulman's work (1986, 1987), in which he drew a distinction between content (subject matter) knowledge, pedagogical content knowledge and curricular knowledge (Grossman, 1990; Gess-Newsome & Lederman, 1999; Hashweh, 2005). The level and depth of these domains of knowledge are the basis of teacher professionalism (Carlsen, 1999; Gess-Newsome, 1999).

Content (subject matter) knowledge includes conceptual and procedural knowledge in the given domain. Furthermore, a teacher needs to understand the nature of the knowledge—that is, the epistemological and ontological aspects of the subject. *Pedagogical content knowledge* (PCK) is a knowledge domain that distinguishes teachers from other subject specialists (Shulman, 1987; Carlsen, 1999). PCK is the synthesis of all knowledge needed for the teaching and learning of a certain topic (Grossman, 1990).

The third main category of teacher knowledge is *general pedagogical knowledge* (GPK) (Gore & Gitlin, 2004). Morine-Dersheimer and Kent

(1999) argue that general pedagogical knowledge consists of the following knowledge areas: (1) classroom management and organisation, (2) instructional models and strategies and (3) classroom communication and discourse. Stronge, Ward, Tucker and Hindman (2007) researched the relationship between teacher quality and student achievement and found that professional teachers scored higher across the three domains: instruction, student assessment and classroom management. They also recognised that professional teachers tended to ask higher level (e.g., analysis) questions and had fewer incidences of off-task behaviour than teachers that do not meet "professional" criteria.

The original model by Shulman has been augmented; for example, Gess-Newsome and Lederman (1999) introduced teachers' *contextual knowledge* to this model, defined as knowledge of the context of teaching. This context includes who they teach (their students), where they teach (their classrooms, schools, communities and so on) and what they teach (the subject, level, curriculum and their relationship to local, state and national standards). Moreover, the ethical, political, economic and social factors that influence teaching and learning in schools are included in the concept of contextual knowledge (Abell & Lederman, 2007). Furthermore, contextual knowledge is employed when a teacher utilises different physical and digital learning environments. A learning environment refers to the diverse locations, contexts and cultures in which students learn. It need not be a physical place and can also be digital, online, mobile or remote (McFarlane, 2015). Moreover, out-of-school settings such as museums and field trips can be out-of-school learning environments.

In addition to the previously introduced knowledge base, at least two other competences could be included in the definition of a professional teacher according to the international literature: (1) competence for networking and partnerships and (2) competence for lifelong learning.

Skills for networking and partnerships

Competences for networking in and out of school and, moreover, the ability to build partnerships are important for a professional teacher. Networks facilitate the sharing of ideas, opinions and experiences and, furthermore, are important in the creation and adoption of educational innovations (Rogers, 2003). In a partnership, there are at least two parties collaborating and sharing common aims. Networks and partnerships—such as grade-level teams, principal teams and multi-professional teams looking for solutions for students with learning or behavioural difficulties—are important in-school networks.

Moreover, networking and partnerships are needed with entities outside the school such as with organisations and companies in the community and, especially, with parents. A school-family partnership can be organised through school-family events and personal meetings in order to support communication and the sharing of common aims. Technology offers a variety of tools for enhancing cooperation in networks and partnerships (Korhonen & Lavonen, 2014b). Networks and partnerships can be supported through encouraging leadership and a collaborative school culture (Hargreaves & Goodson, 1996; Freidson, 2001; Evans, 2008). In contrast, a competitive school culture, which is a consequence of testing, inspection and control or accountability, is not supportive of networking and collaboration (Evetts, 2006).

Competence for life long learning

Another competence that is missing from Shulman's model of a professional teacher's knowledge base introduced above is the competence for lifelong learning. A professional teacher is ready to learn new knowledge in the teaching profession. This competence is often assumed to be developed through studies in research methodology and through engaging

in research activities. Therefore, a professional teacher is viewed as both a critical user as well as a producer of educational knowledge (Gitlin, Barlow, Burbank, Kauchak & Stevens, 1999; Pendry & Husbands, 2000; Reis-Jorge, 2005).

A professional teacher is a user of educational knowledge when theory and practical experience are combined or when interpreting educational situations through reflection. *Reflection* refers to the process in which an experience is recalled, considered and evaluated, usually in relation to a broader purpose. Rodgers (2002) describes reflection as a meaning-making process comparable to the research process and lists the phases of reflection as follows: (1) setting aims and recognising the problem(s), (2) observing one's own behaviour in practice, (3) describing observations and (4) analysing observations and experiences. Moreover, this type of knowledge and competence is needed in broad planning, including the preparation of the local curriculum, the implementation of teaching and learning activities and, furthermore, in the assessment of teachers' teaching and students' learning and learning outcomes.

Support of teacher professionalism in the Finnish education context

As already emphasised, a teacher's professionalism is not solely based on that individual teacher; at a minimum, the following factors have an influence how other people perceive the teacher's professionalism: cultural and education policy factors at the state level and school-level factors, like leadership, a collaboration culture and school-society-family partnerships (Müller, Norrie, Hernández & Goodson, 2010). In the Finnish context, teacher professionalism also refers to teachers' academic status and independence from heavy control or external inspection (Krzywacki, Lavonen & Juuti, 2013). Therefore, the education context, including

educational policy, perspectives on curriculum and assessment and approaches to teachers' daily activities, are introduced here in order to support the holistic understanding of Finnish teachers' professionalism.

Finnish education policy

Educational equality is the most essential aspect of Finnish education policy. According to this policy, students should have equal possibilities to learn; thus, education, including books, meals and health care, is free to all students (Laukkanen, 2008; Sahlberg, 2011; Niemi, Toom & Kallioniemi, 2012). One important consequence of this equality policy is effective special education. The policy's aim is to prevent students from dropping out and to support the learning of all students. As part of this policy, teachers should not consider the students in their class as one entity; instead, teaching should be adjusted to meet the individual needs of each student (Jahnukainen, 2011). The *Basic Education Act* emphasises different levels of support for individual students.

Another characteristic of Finnish education is its culture of trust. Education authorities and national-level education policymakers trust professional teachers, who know, together with principals, headmasters and parents, how to provide the best education for children and adolescents in a certain district. Schools and teachers have been responsible for choosing learning materials and teaching methods since the beginning of the 1990s, when the national-level inspection of learning materials was terminated. Moreover, there have been no national or local school inspectors since the late 1980s. Teachers are valued as professionals in curriculum development, teaching and assessment at all levels (FNBE, 2004, 2014). The teaching profession in Finland has always enjoyed great public respect and appreciation (Simola, 2005).

Local-level curriculum design empowers teachers

The Finnish National Board of Education (FNBE), a national institution, is responsible for the implementation of the national education policy by preparing a national framework curriculum. The core curriculum (e.g., FNBE, 2004, 2014) discusses values, learning, learning environments and general goals and aims, like learning of 21st century competences (Vahtivuori-Hänninen *et al.*, 2014). Furthermore, it describes general aims and subject-specific objectives. The aims and objectives describe core competences to be learned in each subject and cross-curricular themes. The curriculum lists basic concepts in each subject but the list is just a suggestion—not obligatory. Therefore, the aims and objectives are the most central aspects of the curriculum—there is no traditional syllabus.

However, local education providers—the municipalities—have broad autonomy. They are responsible, with teachers, for planning local curricula, organising assessment and grading and using these data to evaluate how well the goals in the curriculum have been met. The role of a principal or a head teacher is important in school development and, moreover, in the implementation of educational policy at the local level (Lavonen, 2007).

Teacher-conducted assessment

In Finland, we have had a long-standing policy of teacher-conducted assessment, and teachers are considered to be at the core of assessment by implementing and mediating assessment procedures. This internal, teacher-conducted assessment policy also supports teachers in modifying their classroom practices (Lavonen & Laaksonen, 2009).

Krzywacki, Koistinen and Lavonen (2012) examined Finnish primary and lower secondary

science teachers' views on assessment and how they implement assessment as part of their teaching. According to several interviews, assessment is mainly carried out as an internally guided, integrated element of teaching and learning. However, the autonomous role of teachers influences the way assessment is integrated as part of teaching and learning in Finnish classrooms: teacher-conducted assessment are improving teaching and learning inside the classroom not for producing school rankings and ensuring adherence to a standardised syllabus.

Various roles of teachers at the school site

Korhonen, Lavonen, Kukkonen, Sormunen and Juuti (2014); Sormunen, Lavonen and Juuti (2014); Kukkonen and Lavonen (2014) and Korhonen and Lavonen (2014a) have theoretically and empirically analysed the various roles of Finnish teachers in relation to the local curriculum and learning environments, networks and partnerships and, furthermore, leadership.

Finnish teachers are responsible for the versatile grouping of students and their learning and collaboration in different learning environments. Moreover, they are responsible for the continuous development of the use of information and communication technology (ICT) tools. Is the grouping of students and use of learning environments to support meaningful learning; which is grounded in activity and intention, reflection and self-evaluation, collaboration and interaction, construction, contextualisation and cumulative learning. Throughout this grouping process, the students are to be acknowledged as individuals with diverse needs.

In an optimal situation, a Finnish school has versatile networks and partnerships on five different levels. At the school level, there are grade and subject teams. Moreover, each school should have a multi-professional team that looks after

the well-being of all pupils and, particularly, aims to solve the problems of pupils who have learning or behaviour difficulties through inclusion and through the help of special needs teachers and classroom assistants. Several schools network with other schools in order to support teachers in thematic networks to share experiences and learn from each other. Networks and partnerships are supportive for the sharing of ideas, the generation of new ideas and the adoption of new ideas.

Essential to leadership in Finnish schools is strategic (or goal) orientation, versatile collaboration and clear structures in administration. As a part of strategic orientation, the school principal is responsible for the preparation of the local curriculum and the organisation of quality assurance. This type of leadership and professional culture support teachers' collaboration. In summary, instructional leadership and transformational leadership are integrated in Finnish schools in a similar way as Marks and Printy (2003) have described. However, in Finnish schools, instructional leadership does not entail heavy accountability, as it does in many other countries.

Finnish teacher education: Secondary teacher education at the University of Helsinki

The Finnish education context is challenging for teachers because of the various duties they are required to perform such as planning the local curriculum and organising assessment, networks and partnerships. For this reason, primary and secondary teachers are educated in master's programmes at universities. In fact, there has been a 35-year tradition of educating primary school teachers (grades 1-6) in master's-level programmes, and for more than 100 years, secondary teachers (grades 7-12) have been educated at this level. Primary teachers typically teach all the subjects in a primary school, whereas secondary teachers typically

teach two subjects in lower and upper secondary schools (Jakku-Sihvonen & Niemi, 2006). Primary teachers are educated through the university's Department of Teacher Education. Secondary teacher education is organised in cooperation between the department of the specific discipline and the Department of Teacher Education.

According to national —and university— level strategies, teacher education should be based on scientific research and professional practices in the field. The study programme should particularly provide student teachers with the knowledge and skills needed to operate independently as academic professionals and to develop their fields. Specifically, according to the *Teacher Education Development Programme* (2002), teacher education programmes should help students to acquire, among other skills, the following:

- high-level content/subject matter knowledge, pedagogical knowledge, pedagogical content knowledge, contextual knowledge and knowledge about the nature of knowledge;
- social skills such as communication skills and skills to cooperate with other teachers and skills to use ICT;
- moral knowledge and skills such as the social and moral codes of the teaching profession;
- knowledge about the school as an institute and its connections to society;
- skills to cooperate with other teachers and skills for the school-community-parents partnership (where the community includes local contexts and stakeholders);
- academic skills such as research skills;
- skills needed in developing local curricula, lesson planning and organising the assessment of teaching and learning and
- skills needed to develop one's own teaching methods and the teaching profession more broadly.

When these national-level aims are compared to definitions of teacher professionalism, several similarities can be identified. The versatile knowledge base —including subject matter knowledge, pedagogical knowledge, pedagogical content knowledge and contextual knowledge, competence for networking and operating in partnerships and, moreover, competence for lifelong learning— are essential to Finnish teachers' competence.

Secondary teacher education at the University of Helsinki

At the University of Helsinki, secondary teacher education is organised in cooperation with the departments of specific subjects in six faculties, including the Faculty of Behavioural Sciences. Studies are divided into two parts: (1) the subject is studied in the department of the particular subject (e.g., Physics) and (2) pedagogical studies take place in the Department of Teacher Education and Teacher Training Schools. Students take a major and a minor in the subjects they intend to teach; they are free to choose this combination of subjects. The Department of Teacher Education is responsible for organising the studies for the required 60 credit points of pedagogical studies which is a second minor for student teachers. Altogether, 20 credit points are allocated for teaching practice. This gives trainee teachers the qualifications necessary for teaching positions in all type of schools in their major and minor subjects. They write their bachelor's and master's theses (40 study points) on their major subject. In their master's thesis, they choose a pedagogical n and prepare the thesis under the guidance of a professor or in a research group. Furthermore, the students also prepare a pedagogical thesis with their pedagogical studies.

The undergraduate courses in the subject departments help student teachers develop deep content/subject matter knowledge and an understanding of relevant concepts as part of the

subject's conceptual framework. Teachers need this knowledge when they guide students at school in problem-solving activities and when they ask high-quality questions; moreover, this knowledge is necessary when teachers develop formative and summative assessment activities (Lavonen *et al.*, 2007). The student teachers also study pedagogical content knowledge within their master's-level courses in their subject departments. For example, in the departments of Physics and Chemistry, they become familiar with how to introduce certain concepts through demonstration or lab activities. Furthermore, they learn how concepts are related to other concepts, natural laws and theories in a certain domain of knowledge through a course focusing on conceptual meaning. Furthermore, they learn the historical and philosophical bases of the subjects they teach. Several activities within their courses support lesson planning. These three courses support the development of pedagogical content knowledge (Lavonen, Jauhiainen, Koponen & Kurki-Suonio, 2004), which is further developed in specific pedagogical studies, described below.

According to the curriculum of pedagogical studies, the students should become aware of the different dimensions of the teaching profession such as the social, philosophical, psychological, sociological, multicultural and historical bases of education; they should also be prepared to develop different kinds of partnerships such as school-family and school-society partnerships. The pedagogical studies support the students to combine the educational theories of their subject knowledge with their personal histories. The courses can be classified into four categories: general courses in education, educational research, subject pedagogy courses and teaching practice (table 1). The students should also become prepared to cooperate with multi-professional teams at the school level. In a multi-professional team, for example, social workers, school psychologists and special education teachers collaborate and look after the well-being of the school's students. Furthermore, student teachers should learn to reflect broadly on their own personal pedagogical "theory" or assumptions about their own work and the importance of lifelong professional development.

TABLE 1. The structure of pedagogical studies in secondary teacher education at the University of Helsinki

Pedagogical studies			
General courses on education, teaching and learning 13 cp	Subject pedagogy 17 cp	Educational research 10 cp	Teaching practice 20 cp
<ul style="list-style-type: none"> • Psychology of development and learning, 4 cp • Education for diversity (special and multicultural education), 6 cp • Social, historical and philosophical foundations of education 4 cp 	<ul style="list-style-type: none"> • Psychological basis of teaching and learning the subject 4 cp • Curriculum development and lesson planning 6 cp • Evaluation and development of subject teaching and learning 7 cp 	<ul style="list-style-type: none"> • Research methodology in education, 3 cp • Teacher as a researcherseminar, 3 cp • Minor dissertation in pedagogy, 4 cp 	<ul style="list-style-type: none"> • Supervised teaching practice (basic, applied and advanced), 18 cp • Reflection supported by activities, 2 cp

(cp = credit point, 1 cp is equal to 27 hours of total work (including independent studies).)

Because student abilities in a school are relatively heterogeneous, much emphasis is given to different types of learners, to versatile planning of teaching, to teaching and learning methods and to the teachers' roles in formal and informal assessment, feedback and encouragement. During their pedagogical studies, the trainee teachers are taught to integrate subject and pedagogical content knowledge, educational theories (e.g., theories of learning, motivation and self-efficacy), their own experiences of teaching and learning and, furthermore, their experiences of school practices into their own personal pedagogical theories or views. They plan how to teach specific topics and then teach those topics during their teaching practice. Moreover, they participate in micro-teaching sessions within their pedagogical studies. Consequently, student teachers acquire both pedagogical knowledge and pedagogical content knowledge, as well as the competence for lifelong learning in different situations (Lavonen *et al.*, 2007).

Ways of working in secondary teacher education

Ways working and learning in secondary teacher education support the development of teacher professionalism. Particularly, working in small mixed groups and writing several theses facilitate learning how to network and collaborate (Lavonen, Jauhiainen, Koponen & Kurki-Suonio, 2004; Krzywacki, Lavonen & Juuti, 2013). For example, during their pedagogical studies, the primary and secondary student teachers learn, in mixed groups, the basics of education for diversity and, at the same time, how to collaborate in a heterogeneous teacher group. In a mixed group, for example, mathematics, science, foreign language and art teachers collaborate.

Several pedagogical approaches are used in pedagogical studies in the Department of Teacher Education. For example, in order to

utilise "Flipped" classroom pedagogy, in physics and chemistry teacher education a web-based learning environment has been prepared in order to support the learning of pedagogical knowledge and pedagogical content knowledge within the different courses of pedagogical studies. The courses and web-based learning environment introduce a collection of teaching (Joyce, Weil & Calhoun, 2003) and assessment methods, as well as classroom management, communication and discourse approaches. This kind of toolkit supports the student teachers to select teaching, communication and assessment methods that will assist their students in their classrooms to achieve the aims stipulated in the national-level curriculum.

An essential characteristic of primary and secondary teacher education in Finland is an emphasis on research (Jakku-Sihvonen & Niemi, 2006). Student teachers learn how to *consume* and *produce* educational knowledge within their pedagogical studies (Gitlin, Barlow, Burbank, Kauchak & Stevens, 1999; Pendry & Husbands, 2000; Reis-Jorge, 2005). These student teachers consume educational research-based knowledge when they combine theory and experience or interpret situations during their teaching practice. The capacity to produce educational knowledge is learned during research methodology courses and while conducting their educational research projects (bachelor's, pedagogical and master's dissertations) (Gore & Gitlin, 2004). The knowledge and skills learned during their thesis projects support lifelong learning.

Teaching practice constitutes one-third of the pedagogical studies. During teaching practice, the student teachers are supported to transform practitioner (practical) knowledge into professional knowledge through reflective activities and guided discussions in small groups. *Reflection* here refers to the process in which an experience is recalled, considered and evaluated in relation to learning from practice (Zimmerman, 2002). Mentor teachers, who supervise the

teaching practice at the teacher training school, support student teachers in the meaning-making process by facilitating the setting of aims for teaching practice, the observation of one's own behaviour, the describing of observations and experiences and the analysis of observations and experiences (Rodgers, 2002). The role of supervision during teaching practice is central, and a trained mentor teacher helps the student teacher to include all possible aspects of a teacher's work in their reflection. During the advanced-practice stage, the student teacher becomes increasingly independent, and discussions with supervisors are expected to become deeper and more detailed. Consequently, student teachers learn from practice but also learn reflective skills. Reflective skills are essential for teachers' lifelong learning. In summary, pedagogical studies are a core part of teacher education in Finland. These studies support student teachers to learn the following (Lavonen *et al.*, 2007):

- to integrate subject matter knowledge, knowledge about teaching and learning and school practice into their own personal pedagogical view;
- to become aware of the different dimensions of the teaching profession: the social, philosophical, psychological, sociological and historical bases of education;
- to be able to collaborate in different networks and partnerships;
- to be able to reflect for, in and on action;
- to act as autonomous professionals in planning, implementing and assessing teaching and learning and
- to develop the potential for lifelong professional development through research orientation and reflective activities.

Challenges of teacher education in Finland

Finnish PISA researchers Kupari *et al.* (2013) reported the declining proficiency of Finnish youth in the education system. Moreover, they reported students' negative perceptions of the

school climate and school satisfaction. According to the TALIS 2013 (OECD, 2014b), Finnish teachers feel that they lack the competence for networking and partnership building. Moreover, teachers also reported difficulties in controlling disruptive behaviour in their classroom or managing challenging students' needs (Taajamo, Puhakka & Välijärvi, 2014). Consequently, teachers reported they lack pedagogical and pedagogical content knowledge, the knowledge and skills related to contextual knowledge and, moreover, the skills to network and build partnerships. Furthermore, they lack the competence for continuous professional development in these areas.

Due to the decline in PISA results, decreasing school satisfaction and shortcomings in teachers' competences, in spring 2014 the Minister of Education Krista Kiuru launched a project to plan for "Future Primary and Secondary Education" (Press release, 2014). Altogether, she invited almost 100 researchers, teacher educators and school principals to participate in the planning process. The main aims of the project were to assess the current situation, examine the reasons for the challenges and find ways to overcome them.

As a result of this project, recommendations for developing primary, secondary and teacher education were developed. In the ensuing publication, the following measures for teacher in-service education and lifelong professional development were proposed (Ouakrim-Soivio, Rininen & Karjalainen, 2015):

- *Development of learning and pedagogy.* The development proposals related to this theme seek to highlight the need to find new pedagogical solutions that support group and individual learning.
- *Developing the operating culture of the school and the structure of the school day.* The operating culture and structures of the school must support pupils' learning, well-being and participation.

Schools must be ethical learning communities where pupils have a voice and a choice, and also bear responsibility for their own learning.

- *Developing teacher education.* Research-based teacher education will be developed further in cooperation with universities and municipalities to form a continuum of initial education and professional development. In order to ensure that Finnish teacher education is of a high quality, a national development programme to support teacher educators' professional competences will be launched.
- *Supporting teachers' life long professional development.* Systematic continuing education activities are a precondition for developing the professional competence of teachers. To achieve this goal, the concept and contents of continuing education need to be redefined. The national continuing education structure and funding system must be updated to support both teachers' systematic professional development and the development of schools.
- *Developing leadership and ensuring adequate resource allocation to management.* Principals' qualification requirements must be reviewed in the light of the changes in their job description. Principals' education will be developed, their management skills will be improved, and a personal plan will be prepared to support their professional development.

Closing words

Finnish teacher education policy and teacher education programmes have always emphasised the learning of a professional knowledge base, skills for networking and, furthermore, competence for lifelong learning in a way similar to that emphasised in the international research literature on teacher professionalism.

As emphasised earlier, Finnish teachers' professionalism not only pertains to the qualities of an individual teacher but also refers more broadly to the status of teachers and depends on cultural and education policy factors at the state and school levels. The Finnish educational system, in contrast to the top-down systems of many other countries, is characterised by the devolution of decision making and responsibilities to the local level; teachers are responsible for developing the local curriculum based on the National Core Curriculum (FNBE, 2004, 2014). Moreover, teachers are responsible for student assessment and evaluating their own teaching —there is no national-level testing or inspection in compulsory education. Therefore, teachers play a particularly important and influential role in education.

Both Finnish education policy and the Finnish education system support teachers to fulfil this professional role (Müller, Norrie, Hernández & Goodson, 2010). This role, along with the knowledge and skills (competences) needed in the teaching profession, are learned through teacher education. These competences help teachers to act as academic professionals, collaborate in school communities and continuously learn new competences. For example, Finnish secondary teachers learn versatile subject knowledge in the departments of specific subjects during their training. In these subject studies, student teachers become familiar with the epistemological and ontological basis of the subject under the guidance of professors who are conducting their own research in the field. This kind of knowledge is important in schools when teachers guide students through different kinds of activities and problem-solving. Furthermore, student teachers learn pedagogical knowledge and pedagogical content knowledge during their studies both in the departments of specific subjects and in the Department of Teacher Education. In addition to these domains of teacher knowledge, student teachers learn how to consume and produce educational research. This research orientation in teacher

education is also important for the development of lifelong learning competences, which are further developed during the teaching practice and related reflective activities. Small group activities and the grouping of students supports the development of network and partnership-building skills.

The research orientation in teacher education provides competences for the broad planning of teaching and versatile assessment. In addition to planning single lessons, teachers participate in the planning of the local curriculum. Furthermore, teachers are responsible for the assessment of their own teaching and student learning outcomes. Therefore, teachers are responsible for and are able to plan, implement and assess their own teaching and their students' learning. Finnish teachers follow their students' progress formatively and support the learning of all their students, including those with special needs. Teacher effectiveness is not considered a characteristic specific to an individual teacher; rather, effectiveness is strongly associated with the characteristics of the whole education context—the organisation of education in practice through national—and local-level curricula according to Finnish education policy. These competences are needed in lifelong learning.

Several challenges have been recently recognised based on the OECD PISA 2012 assessment and TALIS 2013 research outcomes. Therefore, there are several areas of pedagogical knowledge that should be improved in initial teacher education. Teachers should learn to better account for diversity among students and to better support students' engagement in learning. Teachers need more skills for improving students' school satisfaction. They also need more skills for networking with other teachers and for developing school-family partnerships. Finally, it seems that the current research orientation in teacher education does not guarantee optimal lifelong learning competences. Teachers need more versatile competences, like networking and collaboration

skills to be able to engage in continuous lifelong learning with colleagues.

Several differences can be observed between Finnish educational policy and implementation (particularly as it pertains to teacher education) and global education movements (Sahlberg, 2004). In general, Finnish education policy has a long-term focus and is not based on ad hoc political agendas. Moreover, over the last two decades, there have been three common features in global education policies and reforms that have aimed to improve the quality of education and professionalism of teachers and schools (Hargreaves, Earl, Shawn & Manning, 2001) but have not yet become a part of Finnish educational policy and teacher education.

Firstly, outcome-based education reform was an important global movement in the 1980s. This movement was followed in the 1990s, originally in Anglo-Saxon countries, by standards-based education policies, including centrally prescribed performance standards for schools, teachers and students. Nationwide testing of students' learning outcomes is part of an outcome-based approach. In Finnish Education there is different approach to curriculum and assessment. Within the framework of the Finnish National Core Curriculum, teachers collaboratively create a local curriculum at the municipality and school levels. The local curriculum is both a process and a product. The nature of the process empowers teachers in their planning and increases their ownership of the curriculum. Teachers are free to choose teaching methods and contents according to the aims of the curriculum. Furthermore, they have freedom in the selection of teaching methods and teaching materials. Consequently, flexibility and decision making at the local and even at the classroom level have been guiding principles of school education in Finland. In the Finnish education context, external demands are not visible in everyday school practices and do not guide teachers'

work, including their assessment practices. This atmosphere supports the teachers in both developing learning environments and in teaching collaboratively. Competition and rankings hardly exist in the Finnish education context—which instead supports collaboration, networking and partnerships. Finnish teacher education aims to educate student teachers on how to collaborate, how to plan and how to assess learning outcomes. However, there are challenges to facilitating the development of collaboration and networking skills, more broadly, through teacher education programs.

A second common feature in global education policy has been the emphasis on (scientific) literacy and numeracy. As a consequence, the curricula and, therefore, teaching in schools places a strong emphasis on the structural knowledge of systems, technical skills and cognition in many countries. The Finnish National Core Curriculum emphasises broader and more general aims, like learning of 21st century competences (Vahtivuori-Hänninen *et al.*, 2014). Teachers are prepared to take this broad view seriously. Moreover, the education context supports the emphasis on these aims and competences. For example, because there is no national-level testing, teachers do not concentrate on easily measurable skills.

A third global trend has been the development of consequential accountability systems for schools. The success or failure of schools and their teachers is often determined by standardised tests and external evaluations that devote attention to only limited aspects of schooling such as student achievement in mathematical and reading literacy. Again, in Finnish primary and lower secondary school another approach

—trust in teacher professionalism— has been used. Furthermore, the needs of individual students in the classroom and their learning are considered to be essential. Because of these emphasis on learning process and needs of individual students, assessment practices are supportive for them. The Finnish approach for assessment is close to “the assessment for learning” initiated by Black and Wiliam (2003). A culture of trust within the Finnish education system values teachers’ and headmasters’ professionalism and judgment in determining what is best for students and in reporting on the progress of their learning. However, despite the lack of heavy testing and inspection, school satisfaction is relatively low among students. Therefore, during initial teacher education, student teachers should learn how to take full advantage of the potential of our non-consequential accountability system. There is space for increasing co-planning, project working and assessment that encourages improvement.

To conclude, the Finnish approach to teacher professionalism/effectiveness is an “input approach”, according to which a professional teacher should have a versatile knowledge base and competence for networking and lifelong learning. The construction of this knowledge base begins during initial teacher education. This training supports Finnish teachers’ autonomy in curriculum design and in selecting instructional strategies and approaches to assessment. The master’s-level teacher education programme supports pedagogical thinking and autonomous decision making. Moreover, teacher autonomy is facilitated through the cultural respect afforded to teachers (Auguste, Kihn & Miller, 2010). Finally, Finnish education policy-makers supports teachers in their autonomous roles and responsibilities.

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Resumen

Formando la profesionalidad del docente a través del Programa de Máster de Formación del Profesorado en Finlandia

INTRODUCCIÓN. La profesionalidad docente es discutida en los contextos de literatura de investigación internacional y el sistema educativo finlandés. Cuestiones importantes como el test PISA son útiles para analizar el sistema educativo finlandés desde una perspectiva de políticas educativas. **MÉTODO.** Se presenta una primera aproximación a la investigación sobre la profesionalidad docente y se analizan las funciones del profesorado en el contexto educativo finlandés. También se analiza la formación del profesorado, es decir, cómo los estudiantes se convierten en profesionales, en función del diseño curricular y de enseñanza y de las metodologías de evaluación. **RESULTADOS.** En el contexto finlandés, la profesionalidad docente se asocia con poseer un conjunto de conocimientos versátiles, habilidades de colaboración y de trabajo en red, competencia para aprender a lo largo de la vida y, además, capacidad para utilizar estos potenciales de forma innovadora para poder actuar eficazmente. Varias razones explican cómo es la profesionalidad docente en Finlandia: las reformas hechas en educación en los ochenta; la preparación del profesorado para que éstos tengan una visión amplia de las competencias necesarias para el siglo XXI; y una cultura de confianza en cuanto al profesorado y a su capacidad de asegurar los procesos de aprendizaje de su alumnado. **DISCUSIÓN.** El profesorado finlandés planifica y pone en práctica la docencia y evalúa su propia enseñanza, el aprendizaje del alumnado y los resultados de aprendizaje, colabora con sus colegas y con la sociedad y desarrolla continuamente su profesión docente en la globalidad del contexto escolar. El profesorado tiene una gran responsabilidad respecto a la forma en cómo su alumnado aprende, pero a su vez el profesorado puede desarrollar su autonomía en cuanto al diseño del currículum, el uso de estrategias de enseñanza y las formas de evaluar.

Palabras clave: *Formación del profesorado, Profesorado profesional, Profesorado eficaz, Competencia del profesorado.*

Résumé

La formation des futurs enseignants au moyen des études de Master en Finlande

INTRODUCTION. Le professionnalisme des enseignants est débattu dans le cadre de la littérature des recherches internationales et du système éducatif finlandais. Des outils comme le test PISA sont utiles pour analyser le système éducatif finlandais dans la perspective des politiques éducatives. **MÉTHODE.** Pour commencer, on fait une première approche à la recherche sur les problèmes rencontrés par l'éducation finlandaise ainsi que du rôle des enseignants. Enfin, la formation des enseignants (c'est-à-dire, comment les stagiaires deviennent des experts en la création de programmes d'études et des méthodologies d'évaluation) est examinée par rapport au programme de Master de l'Université d'Helsinki. **RÉSULTATS.** Le professionnalisme des enseignants dans le contexte finlandaise inclut: une base de connaissances polyvalents, des compétences de coopération et de networking, des compétences pour l'apprentissage tout au long de la vie et une capacité à utiliser ces aspects de façon innovante afin d'agir avec efficacité. Nombreuses raisons expriment les caractéristiques du professionnalisme des enseignants finlandais, comment par

exemple les reformes éducatives dans les années quatre-vingt; la formation des enseignants en les compétences nécessaires pour faire face aux défis du siècle XXI; ainsi que l'existence d'une culture de confiance dans la capacité des enseignants pour assurer les processus d'apprentissage de leurs étudiants. **DISCUSSION.** Les enseignants finlandais planifient et gèrent l'enseignement; ils évaluent leur enseignement ainsi que les apprentissages; ils coopèrent avec les autres enseignants et la société; ils développent constamment le travail d'enseignement en rapport à l'ensemble du contexte de l'école. Les enseignants ont une très grande responsabilité sur comment les étudiants apprennent, mais au même temps ils peuvent développer son autonomie en relation au programme d'études, l'utilisation des stratégies d'enseignement et la manière d'évaluer les apprentissages.

Mots-clés: *Formation des enseignants, Enseignants de formation professionnelle, Enseignants efficaces, Compétences des enseignants.*

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