HANNELE NIEMI, JARI LAVONEN, ARTO KALLIONIEMI, & AULI TOOM

4. THE ROLE OF TEACHERS IN THE FINNISH ED-UCATIONAL SYSTEM

High Professional Autonomy and Responsibility

ABSTRACT

The aim of this chapter is to introduce the main features of the Finnish educational system and how they are related to teachers' work. The chapter describes teachers' professional autonomy and responsibilities in the Finnish schools. Many cornerstones, such as equity, for example, have remained principle to organizing education and schooling, but multiple societal changes and changing conceptions of teaching learning and knowledge set new demands for teachers. Currently, the Finnish educational system is in the middle of significant reforms at all levels of education that bring many demands to teachers' pre- and in-service training. This chapter summarizes the key elements of the reforms and reflects on how teachers and schools could be supported in the midst of these reforms and how they could become learning communities both for students and teachers.

Keywords: teacher's professional autonomy, responsibility, educational reforms, schools as learning communities

THE CONTEXT OF TEACHERS' WORK IN FINLAND

A purposeful policy aimed at equity, a high level of education for all, and excellent teachers has been identified as the main reason for Finnish educational success (Laukkanen, 2007; Niemi, 2014; Sahlberg, 2011). Niemi and Isopahkala-Bouret (2012) summarized the major features of the Finnish education system that influence teachers' work. Their analysis reveals that Finnish education policy has four main principles that guide all the activities throughout the education system. These principles are *equity*, *high-quality education to all learners*, *flexible educational structures*, and *life-long learning integrated into all levels of education*.

Equity in education is a constitutional right that means providing equal opportunities to every learner regardless of their social, ethnic, and economic backgrounds (Finnish National Agency for Education [FNAE], 2017). According to this policy, students should have equal opportunities to learn; thus, education, including books, meals, and health care, is free to all students during basic education (Laukkanen, 2008; Sahlberg, 2011; Niemi, Toom, & Kallioniemi, 2016). After basic education, students have multiple possibilities for further education, for example, in upper secondary or vocational education, and then in polytechnic or university education. This is also provided freely to them.

High-quality education for all with special needs support is necessary. The basic education system is based on a strong inclusive ideology and support strategies for different learners. The main principle is that learners should be supported as early as possible in order to overcome learning difficulties. Teachers

need expertise in recognizing students' needs for special support. If the standard aids given to all students are concluded to be insufficient based on multi-professionally conducted pedagogical assessments, intensified support is organized according to an individual learning plan (Vainikainen, 2014). Students are moved into special classes or schools only in extreme cases; usually, they are provided with support within their own classes. Every teacher is responsible for identifying a student's needs and making plans for that student's growth. This often happens in collaboration with special needs teachers, social workers, nurses, and school psychologists.

Flexible educational structures allow learners to continue their educations, even in cases of failure. The entire student population completes nine years of basic education, and the educational system provides different routes for completing secondary education. After compulsory basic education, graduates opt for general or vocational upper-secondary education. Both forms usually take three years and give eligibility for higher education. Vocational education and training is popular in Finland; almost 50 percent of the relevant age group starts vocational upper-secondary studies immediately after basic education. The big-gest fields are technology, communications, transport, social services, health, and sports. Therefore, upper-secondary education and training has a dual structure, but both routes lead to higher education.

Lifelong learning is integrated into all levels of the system, from early education to adult education. The aim of each level of the educational system is to prepare students to continue their studies. Students must be ready to continue studying at the next level of education, so schools are expected to support learners' personal growth (Niemi & Isopahkala-Bouret, 2012). In basic education (grades 1–9), there is no streaming or tracking. Teaching happens in mixedability groups, so teachers must take care of different learners and identify which kinds of special support students need. They must make a great number of pedagogical decisions every day, and they communicate about students' learning problems with parents, special needs teachers, social workers, and nurses. Teachers must also act as partners in multi-professional groups for students' wellbeing. They are responsible for much more than simply providing teaching content.

The general objective of Finnish non-selective 9-year basic education (primary and lower-secondary school, or pupils between 7 and 16 years) is to support pupils' growth toward humanity and ethically responsible membership in society and to provide them with the knowledge and skills needed in life. Moreover, the instruction aims to promote equality in society and the students' abilities to participate in education and to otherwise develop themselves during their lives (Basic Education Act 628/1998). The Finnish day-care and pre-primary educations are based on an integrated approach to care, education, and teaching, the so-called "educare" model. Learning through play is essential. Pre-primary education is systematic education and is provided in the year preceding the start of compulsory education.

FINNISH TEACHERS BETWEEN AUTONOMY AND RESPONSIBILITY

The Finnish National Agency of Education (FNAE) 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, such as learning the twenty-first-century competences (Vahtivuori-Hänninen et al., 2014). Furthermore, it describes the general aims and subject-specific objectives. The aims and objectives describe the core competences to be learned in each subject, as

well as 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, along with teachers, for planning local curricula, organizing 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).

A productive, flexible interaction exists between partners at the national, municipal, and school levels. Local partners, such as parents and other stakeholders, are invited to contribute. This long-term process has a central role in school improvement and development. According to the PISA 2012 School Questionnaire (OECD, 2012), 62 percent of the participating schools in Finland reported that a principal and the teachers were responsible for curriculum policy. The corresponding percentages were 68 percent in Australia, 48 percent in Singapore, 47 percent in Canada, 44 percent in the United States, and 28 percent in Shanghai. Preparing the local curriculum has a central role in school improvement and development.

A unique characteristic of Finnish education is its culture of trust (Toom & Husu, 2012; Halinen, Niemi, & Toom, 2016). 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). Parents also trust the school, its teachers, and the quality of the work it undertakes, as recognized in the PISA 2012 school questionnaire data (OECD, 2012). According to this data, only 4 percent of Finnish schools reported being subject to constant pressure from parents. The corresponding percentages were 60 percent in Singapore, 36 percent in Australia, 35 percent in the United States, 32 percent in Canada, and 20 percent in Shanghai (OECD, 2013).

The Finnish education evaluation system has been described as enhancement/improvement-led evaluation (Kumpulainen & Laukkanen, 2012; Niemi & Lavonen, 2012). Evaluation is performed for the sake of improvement, not ranking. The teachers' work is not determined by high-stakes testing or outside control. In Finland, there is no standardized testing. The evaluation system aims to determine which kinds of improvements are needed for better learning outcomes, and local education providers (municipalities) are responsible for the quality of educational services and assessment methods.

Finland has 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 (cf. Kumpulainen & Lankinen, 2012). This internal, teacher-conducted assessment policy also supports teachers in modifying their classroom practices. The focus on internal assessment is also seen in the PISA 2012 School Questionnaire (OECD, 2013b): 70 percent of Finnish teachers feel that student assessment is their responsibility. The corresponding percentages were 70 percent in Australia, 58 percent in Canada, 49 percent in Singapore; 40 percent in the United States, and 33 percent in Shanghai. This

internal assessment and Finnish teachers' autonomous role in assessment are supported by the Finnish education policy and context. According to Krzywacki, Koistinen, and Lavonen (2012), the autonomous role of teachers influences the way assessment is integrated as part of teaching and learning in Finnish classrooms: teacher-conducted assessments are improving teaching and learning inside the classroom, not producing school rankings and ensuring adherence to a standardized syllabus.

Teachers also use enhancement-led evaluation in student learning. This means that formative evaluation methods are used to decide how to support various learners. Toom and Husu (2012) write: "Added to this, the task of assessment is to help pupils form a realistic image of their learning and development." It is also stated that pupil assessment forms a whole, in which ongoing feedback from the teacher plays an important part. With the help of assessment, the teacher guides the pupils in becoming aware of their thinking and actions and helps them understand what they are learning.

WHAT IS CHANGING AND WHAT IS LASTING?

The Finnish education system allows teachers a great deal of professional freedom, but it also makes the profession very demanding. From 2014 to 2016, it has had significant national core curriculum reforms for both basic education and high schools. These reforms aim at strengthening students' twenty-first-century skills and providing life-skills to all learners. These reforms have consequences for the teachers' role, and new practices should be integrated with the leading principles of the education system.

New national core curriculum for pre- and primary education was accepted in 2014, and schools started with their local curricula in August 2016. The early education core guidelines were accepted in 2016. Upper-secondary schools (high schools) also have new principles of teaching and learning. Learning is defined in the new core curricula (NCCBE, 2014) as a goal-oriented behavior based on the student's prior knowledge, skills, feelings, and experiences (Vitikka et al., 2016). The student is an active player (or agent) who learns how to set goals and solve problems both independently and with others. In addition to learning, the student learns to reflect on the learning processes, experiences, and emotions and at the same time develops new knowledge and skills. At its best, learning awakens positive emotional experiences and the joy of learning and is a creative activity that will inspire the development of their own expertise. Learning is an integral part of an individual's comprehensive life-long growth and provides building material for a good life. The learning principles are focused on twenty-first-century skills and students' active learning. Collaborative methods are also emphasized. The aim is that dialogical and interactive ways of working promote the involvement and participation of students.

The new core curriculum for basic education contains some changes that might have given rise to the misunderstanding of abolishing separate school subjects in international discussion. The national core curricula are still subject based, but in order to meet the challenges of the future, the focus is on transversal (generic) competences and work across school subjects. Collaborative classroom practices, where pupils may work with several teachers simultaneously during periods of phenomenon-based project studies, are emphasized. The pupils should participate each year in at least one such multidisciplinary learning module. These modules are designed and implemented locally. The core curriculum also states that the pupils should be involved in the plannine.

The key aim of the new curricula is guiding students to have transversal competences (T1–T7), which have been defined for 7 areas:

- T1 Thinking and learning to learn: Students should learn to make observations and seek, evaluate, edit, produce, and share information and ideas. They are encouraged to face unclear and conflicting information and also to seek innovative answers. Playful, gamified learning, physical activities, and experimental approaches are recommended to use in teaching and learning.
- T2 Cultural competence, interaction, and self-expression: Students are growing up in a world where cultural linguistic, religious, and philosophical diversity is part of life. It is important that they learn a respect for human rights. They also are expected to learn how to communicate, modify, and create culture. They should be familiar with their culture and traditions and understand their significance for wellbeing.
- T3 Taking care of oneself and managing daily life: School should promote health, safety, and human relationships and help students in areas of mobility and transport. Students act in the technologically intensive daily life and need to learn how to manage personal finance and consumption and take care of their own and other people's lives.
- T4 Multiliteracy: Students need the competence to interpret, produce, and make value judgements across a variety of different texts. They should learn to interpret the world around themselves and to perceive its cultural diversity.
- T5 ICT Competence: Technological skills are important civic skills. ICT skills are part of multiliteracy. This competence area also includes responsibility in using ICT, skills for information management and creative work, as well as skills for interaction and networking
- T6 Working life competence and entrepreneurship: Students need positive attitudes toward work and working life, and they should understand the significance of the competences acquired in school and in leisure time for their future careers. They need also collaboration with actors outside the school.
- T7 Participation, involvements, and building a sustainable future: Students take part in planning, implementing, assessing, and evaluating their own learning, joint school work, and the learning environments. The main aim is that they learn to work together and that school leads them toward democracy, decision-making, and responsibility. The task of the school is to guide students to become aware of the significance of their choices, ways of living, and actions, not only for themselves, but also for their local environment, society, nature, and promoting a sustainable future.

These aims rest many responsibilities on teachers to support students in life. Teachers' work is not only limited to classrooms; their responsibilities cover working in networks and with many societal partners. According to the new curriculum framework, it is extremely important that the learning environments reflect that children are living in a complex and globalized world that is filled with and modified by different digital tools (ICTs), media services, and games. It emphasizes that the competences enable students to grow as active members of society. Moreover, it emphasizes that students should be guided and encouraged toward the independent, critical search and use of information.

TEACHER EDUCATION IN FINLAND FOR THE FUTURE

There is a long tradition in Finland to educate primary and secondary school teachers at universities in 5-year master's level programs. In fact, there has been

a 40-year tradition of educating primary/elementary teachers (Grades 1–6) and a tradition of more than 100 years of educating secondary teachers (Grades 7– 12) in master-level programs at universities. Primary teachers teach almost all the subjects at the primary level, whereas secondary teachers typically teach two subjects in the lower- and upper-secondary schools (Jakku-Sihvonen & Niemi, 2006).

Primary teachers are educated in the Faculties of Education in eight universities. Secondary teacher education is organized in cooperation between the Faculty of the specific discipline and the Faculty of Education. Secondary student teachers take a major and a minor in the subjects they intend to teach, and they participate in undergraduate courses in the subject department. These courses help students develop a deep understanding of subject-matter knowledge and concepts as part of the conceptual framework of the subject (Lavonen et al., 2007).

An essential characteristic of primary and secondary teacher education in Finland is an emphasis on research orientation (Jakku-Sihvonen & Niemi, 2006; Toom et al., 2010). In research orientation, the student teachers learn how to consume and produce educational knowledge within their pedagogical studies. Students consume educational, research-based knowledge when they combine theory and experience or interpret situations during their teaching practices. Student teachers experience the research studies and theses as well as teaching practicum highly relevant for their future work as teachers, since during these studies they are challenged to utilize the theoretical knowledge and understanding in the challenges related to teaching and learning (cf. Saariaho et al., 2015; Niemi & Nevgi, 2014; Toom, 2010). This type of knowledge is needed at the local-level broad planning of teaching and in the development of teaching and school operations, as well as in the assessment of teaching and learning.

The core in both primary and secondary teacher education is pedagogical studies. During their pedagogical studies, students are encouraged to combine educational theories, subject knowledge, and their personal histories. Students' subject knowledge, knowledge about teaching, and learning in specific subjects and school practices are integrated into their own personal pedagogical views. According to the curriculum, students should, for example, be aware of the different dimensions of the teaching profession (social, philosophical, psychological, sociological, and historical bases of education), be able to reflect broadly on their own personal pedagogical view or assumptions on their own work, and have the potential for lifelong professional development.

Today, teacher education is one of the most attractive training programs at the universities. For example, at the University of Helsinki, only 5 percent of the applicants are accepted to the program. In the neighboring countries of Sweden and Norway, teacher education is among the last choices of prospective students! There are several reasons why teacher education is attractive in Finland (Lavonen, 2016): teachers have been educated in 5-year master's-level programs at traditional universities over the last 40 years; teachers are considered academic professionals, the same as other university degree holders; school site operations are supportive of the professionalism of teachers and their collaboration; and the national education policy and its implementation, such as a strong quality culture and the teachers' role in the assessment for professionalism of teachers.

To respond to the new challenges for schools and teachers' work, a Finnish Teacher Education Forum was established by the Ministry of Education in February 2016, aiming to foster the renewal of teacher education as a part of the national reform program. The aims of the Teacher Education Forum are to prepare a development program for teachers' pre- and in-service education (life-

long professional development), to support the implementation of the program, and, moreover, to create the conditions for the renewal of Finnish teacher education through development projects. The program should describe what kind of teacher education and continuous professional development are necessary to ensure that teachers are able to support students in the classroom in learning the competencies (knowledge, skills, and attitude) needed today, tomorrow, and in future. The task of the forum was to support teacher education institutes in creating environments and courses where student teachers have the opportunities to become familiar with new pedagogy, learning environments, and the digitalization of teaching and learning for life-long professional development. The teacher profession, in a broad sense, includes societal connections, collaboration, interaction, and quality work to support students in learning twenty-firstcentury competences.

In order to overcome the challenges related to teachers' competences, the Finnish Teacher Education Forum set holistic competence goals for teachers' pre- and in-service education and continuous life-long professional development. The current forms of the holistic aims are described in Table 1.

Holistic aims for teacher education

A quality teacher should have:

A broad and solid knowledge base

- Subject matter <u>knowledge</u>, pedagogical and pedagogical content knowledge, contextual knowledge;
- Interaction <u>skills</u>, skills for collaboration in different networks and partnerships (experts at school, family, society);
- Knowledge about <u>learning</u> and <u>diversity among</u> learners (special needs, multicultural backgrounds);
- Competence to act as an <u>autonomous professional</u> who can plan, implement, and assess his/her own practices and students' learning;
- Competence to act in various digital (digital skills) and physical (including out of school) <u>learning environments;</u>
- <u>Professional ideology</u>, including a shared understanding of professional <u>values and ethics codes</u> (ethical conduct toward (i) students, (ii) practices and performance, (iii) professional colleagues, (iv) parents and community);
- Research skills (skills to consume research-based knowledge);
- Awareness of the different dimensions of the teacher profession: social, philosophical, psychological, sociological, and historical basis of education and <u>schools' societal connections;</u>
- Awareness about the different cross-curricular topics, such as topics related to human rights and <u>democracy</u>, <u>entrepreneurship</u> education, <u>sustainable development</u>, and globalization;
- Competence to act in the role of an "adult" in a classroom.

Expertise in generating novel ideas and education innovations

- <u>A positive attitude toward continuous change</u>, which requires tolerance of uncertainty and new and innovative ways of thinking;
- Willingness to create a positive atmosphere supportive of creative processes and curiosity, risk-taking related to classroom teaching and learning, and creation of educational innovations and, moreover, awareness of the importance of this attitude for creative outcomes;

- Competence for the implementation of <u>creative processes</u>, <u>generation of</u> <u>ideas</u>, and <u>evaluation of ideas</u> related to classroom teaching and learning and the creation of educational innovations;
- Research skills (skills to produce research based knowledge).

Competence for the development of their own and the school's expertise - <u>A supportive attitude towards different occupational groups;</u>

- <u>Self-regulation</u> skills and skills for control over the work (skills for selfassessment);
- Competence for working in networks and teams, like multiprofessional teams at the school site:
- Competence in curriculum design and as an innovator for pedagogical approaches and learning environments;
- Ability to facilitate, coach, mentor, or train other teachers;
- Competence to <u>reflect</u> on their own personal pedagogical views (reflection *for*, *in*, and *on* action);
- <u>Competence to use assessment outcomes for school development and the</u> <u>ability to develop the school culture</u> in different networks and partnerships with students, parents, other experts, and stakeholders;
- <u>Competence for the development of their own expertise</u> through reflective activities, research-based knowledge, mentoring, in-service training, and seminars and workshops and is also willing to use this competence.

PROFESSIONAL NEEDS FROM TEACHERS' PERSPECTIVES

Toom and Husu (2012) have also found that, although Finnish teachers have strong master's-level educations, pedagogical knowledge, and theoretical understanding of their work, pedagogical action and decision-making in practical classroom situations are very demanding. Current research on Finnish teachers has shown that interaction with pupils in socially and pedagogically challenging situations constitutes the core of teachers' pedagogical wellbeing but also creates stress and exhaustion. Success in both pedagogical goals and more general social goals seem to be fundamental preconditions for teachers' experienced pedagogical wellbeing and satisfaction in their work. Teachers' working environments in Finnish schools have become more heterogeneous, and teachers feel that challenges related to their pupils' backgrounds, diversity, differences in schools, and the role of schools have increased, and, thus, the implications for their teaching and for their pupils' learning has become more significant and more difficult.

Up until recent years and even now, Finnish teachers have been relatively satisfied with their work at schools. In Finland, we have not experienced serious attrition from the teacher profession, a surprising lack of teachers, or turnover intentions or changes of profession after the first years at school, and this is clearly a different situation than in both European and international contexts. Only recently, Finnish researchers, the Finnish Teacher Education Forum (Ministry of Education and Culture) and the Trade Union of Education (OAJ), have explored Finnish teachers' and especially early-career teachers' competences, needs, and wellbeing in the profession from the viewpoint of teachers themselves, as well as from school principals (e.g., Harju & Niemi, 2016; Heikonen et al, 2016). By exploring the needs from multiple perspectives, it is possible to receive a more comprehensive picture of today's school as a working environment and the teachers' professional competencies required by it (cf. Toom,

2017). It is a necessary basis for understanding the current situation and for improving teacher education and mentoring structures and, thus, operations, innovations, and developments at school.

The empirical results of the recent studies (Harju & Niemi, 2016; Heikonen et al., 2016; Lehtonen et al., 2017; Allas et al., 2016) show that the needs and concerns of newly qualified teachers who have worked in the teacher profession a maximum of five years are related to the social aspects and challenges of teachers work, especially to the interactions with pupils inside and outside the classroom, collegial interactions and co-teaching, and collaboration with parents. These relate to the core elements of classroom management and co-regulation of collaboration that become realized when teachers work. The Finnish new teachers' needs for support were especially related to pupils' holistic support and work occurring outside the classroom. More precisely, new teachers wished to receive more support or mentoring for acting in surprising conflict situations, for example, when school bullying occurs or when trying to find a constructive solution to a dilemma. Many aspects of competence can only be developed through participating in activities in the working community (Knight, 2002). Thus, support at a school level is needed to foster new teachers' confidence to act in the complex situations encountered at schools.

Newly qualified teachers found some pedagogical tasks and instructional responsibilities difficult, and they especially perceived differentiating one's teaching and modifying instruction to meet the needs of individual pupils really challenging. Finnish teacher education offers basic knowledge and skills for planning, conducting, and assessing instruction, but it might not necessarily provide enough tools to teach a heterogeneous group of pupils with different needs. Differentiation and modifying teaching according to pupils' needs requires a deep knowledge of the pupils and a thorough understanding of the possibilities to teach them effectively. It also requires diagnostic competencies to identify pupils with specific needs, understand how to support them, and be able to organize this in a pedagogically meaningful way within the group. In heterogeneous classes, multifaceted knowledge and skills, as well as cooperation with colleagues, are often needed to support every pupil's learning effectively. Managing this kind of classroom activities may be especially difficult. Pre-service teacher education might provide theoretical knowledge about special and multicultural education, but even more practical training, experimentation, and modelling these kinds of practices is necessary.

There are studies revealing that teachers have a sense that they do not necessarily have the relevant competences to do their work, and they are not always aware of the impact and possible consequences of their actions and decisions (Husu & Tirri, 2001, 2007). We may see that when teachers are allowed to work as responsible professionals, they also need support in their work and in the process of creating their evidence for improvements. The role of principals has become very important in the Finnish system. They have pedagogical leadership and a strong influence on how open and supportive their school climate is.

THE SCHOOLS AS LEARNING COMMUNITIES

In-service teacher education has many different forms in Finland. Officially, there are three mandatory in-service training days for every teacher each year, but these can be used in very different ways depending on local decisions. However, in many schools, teachers use much more time for their professional development. According to the TALIS review (OECD, 2013), Finnish teachers have less in-service training than teachers in other countries. This may be a real result, but it may also be a consequence of projects that are not purely traditional

in-service training but more school-based development projects. In the Finnish educational system, local providers, the municipalities, or cities are responsible for educational services. The local provider is also responsible for the quality of educational services at the local level, and school development and teachers' professional learning are often integrated.

Teachers' employers must provide resources for teachers' in-service training. Local providers can work together with state-funded projects of the Ministry of Education and Culture and the Finnish National Board of Education, both of which have funding calls for educational staff development. The municipality or city and its local schools can also have a contract with universities and their further education centers or private providers. They can also provide local and school-based training using teachers' expertise and peer-to-peer learning. The memorandum of the Advisory Board for Professional Development of Education Personnel (Hämäläinen, Hämäläinen, & Kangasniemi, 2015) discussed the challenges and development needs for the professional development of education personnel in the coming years. The aim was to ensure that teachers are provided with systematic and sustainable support for their development.

The Finnish National Board of Education (FNBE) (Rajakaltio, 2014, p. 5) emphasized the following core values for the development of teaching profession competences:

- Life-long learning
- Knowledge and research-based orientation
- Effectiveness
- Anticipation of future needs and competences in education

The teaching profession is a learning profession, and teachers are expected to develop their work and profession throughout their careers. Finnish teacher education is based on a strong research orientation. This reflective and critical knowledge creation approach is also important for in-service training. In Finland, there is a strong movement away from individual in-service training days toward more long-lasting development projects and programs that could be more sustainable in their effects. FNBE (Rajakaltio, 2014) outlined that staff training must integrate the latest research, knowledge from education evaluations, new knowledge creation, and competence development.

Most universities have education centers for teachers' in-service training. It is important that the research-based and research-informed orientation of preservice teacher education continues and that teachers can learn the most up-todate knowledge of their subject matters, as well as pedagogy, through in-service training. The BA and MA programs have been planned to give teachers the theoretical and professional competences for managing their work in schools. University centers' in-service training provide more projects and longer development processes than short courses. The aim is that teachers critically reflect on their own work and create small, design-based action research projects through which they learn new competences and also share new ideas with their colleagues. The goal is for in-service training to have a positive effect on students' learning and motivation, as well as teachers' own professional growth and wellbeing.

The Advisory Board for Professional Development of Education Personnel proposes that state-funded professional development should implement the following principles:

- Collect and combine the orientation and mentor training supporting the initial phase of teachers' careers and other necessary continuing education for new teachers transitioning from studies to work into a nationwide working entity.
- Reinforce teachers' research-oriented work.
- In cooperation with their stakeholders, the higher education institutions will develop long-term programs to enhance the professional development of education personnel and new specialist trainings starting in 2015.
- Create a clear model of the education path that enables local variations; the model will support the different career needs of managers and principals.
- Support the generation of peer-to-peer networks, ensuring learning the professional competence required of the profession.

These aims outline state-funded in-service training that is only a complementary subvention to the local providers' organized in-service training. However, they reflect the trends that have been establishing more holistic programs and projects. The earlier day-based and short-course-based trainings are no longer valid in school communities that must face very complex situations. Different teachers also have different needs, and that should be taken into account at local levels.

SUMMING UP

Finnish society is facing many societal and cultural changes, such as migration, multiculturalism, ageing, family structure changes, and development of technology. Schools are becoming very demanding and complex environments. Teachers have to manage all these changes and take an active role in raising serious questions about what they teach, how they teach it, and the larger goals toward which they are striving. Teachers need to view themselves as public intellectuals who combine conception and implementation, thinking and practice in the struggle for a culture of democratic values and justice. Teachers have a right and an obligation to articulate educational needs and challenges in the society they serve. The changing conditions and the high demands of the teaching profession's emerging new requirements requires that teachers' professional development be supported and that teachers can grow in the high-standard profession.

REFERENCES

- Basic Education Act 628/1998: Retrieved from <u>http://www.finlex.fi/en/laki/kaan-nokset/1998/en19980628.pdf</u>
- Cruickshank, D.R., & Haefele, D. (2001). Good teachers, plural. Educational Leadership, 58(5), 26–30.
- Darling-Hammond, L., & Youngs, P. (2002). Defining "highly qualified teachers": What does "scientifically based research" tell us? *Educational Researcher*, 31(9), 13–25.
- FNBE (Finnish National Board of Education) (2004). National core curriculum for basic education 2004. Helsinki: National Board of Education.
- FNBE (Finnish National Board of Education) (2014). A draft of the national core curriculum for basic education. Helsinki: National Board of Education. Retrieved from http://www.oph.fi/ops2016
- Hietajärvi, L., Tuominen-Soini, H., Hakkarainen, K., Salmela-Aro, K., & Lonka, K. (2015). Is student motivation related to socio-digital participation? A person-oriented approach. *Procedia – Social and Behavioral Sciences*, 171, 1156–1167. https://doi.org/10.1016/j.sbspro.2015.01.226

- Jahnukainen, M. (2011). Different strategies, different outcomes? The history and trends of the inclusive and special education in Alberta (Canada) and in Finland. Scandinavian Journal of Educational Research, 55(5), 489–502.
- Jakku-Sihvonen, R., & Niemi, H. (Eds.). (2006). Research-based teacher education in Finland: Reflections by Finnish teacher educators (Research in Educational Sciences 25). Turku, Finland: Finnish Educational Research Association.
- Kärnä, P. & Rautopuro, J. (2013). Mitä on oppimistulosten taustalla [In Finnish] In A. Räisänen (Ed.), Oppimisen arvioinnin monet käytännöt. Raportit ja selvitykset 3/2013 (pp. 87–211). Helsinki, Finland: National Board of Education.
- Krzywacki, H., Koistinen, L., & Lavonen. J. (2012). Assessment in Finnish mathematics education: Various ways, various needs. Paper presented in 12th International Congress on Mathematical Education, 8 July–15 July 2012, COEX, Seoul, Korea.
- Krzywacki, H., Lavonen, J. M. J., & Juuti, K. (2013). There are no effective teachers in Finland— Only effective systems and professional teachers. In O-S. Tan & W-C. Liu (Eds.), *Teacher Effectiveness*. Centage learning
- Kupari, P., Välijärvi, J., Andersson, L., Arffman, Nissinen, K., Puhakka, E. & Vettenranta, J. (2013). PISA12 ensituloksia. Opetus- ja kultuuriministeriön julkaisuja 2013:20.
- Laukkanen, R. (2008). Finnish strategy for high-level education for all. In N. Soguel & P. Jaccard (Eds.), *Governance and performance of education systems* (pp. 305–324). The Netherlands: Springer.
- Lavonen, J. (2007). National science education standards and assessment in Finland. In D. Waddington, P. Nentwig & S. Schaze (Eds.), *Making it comparable* (pp. 101–126). Berlin: Waxmann.
- Lavonen, J. (2013). Building blocks for high quality science education: Reflections based on Finnish experiences. LUMAT 1(3), 299–313.
- Lavonen, J. (2016). Educating professional teachers through the master's level teacher education programme in Finland. Bordón 68(2), 51–68.
- Lavonen, J., Krzywacki-Vainio, H., Aksela, M., Krokfors, L., Oikkonen, J., & Saarikko, H. (2007). Pre-service teacher education in chemistry, mathematics and physics. In E. Pehkonen, M. Ahtee, & J. Lavonen (Eds.), *How Finns learn mathematics and science* (pp. 49–67). Rotterdam, Netherlands: Sense Publishers.
- Ministry of Finance (2016). Europe 2020 Strategy Finland's National Reform Programme, Spring 2016. Ministry of Finance publications - 11c/2016.
- Muijs, D. (2006). Measuring teacher effectiveness: Some methodological reflections. *Educational Research & Evaluation*, 12(1), 53–74
- Niemi, H. & Lavonen, J. (2012). Evaluation for improvements in Finnish teacher education. In J. Harford, B. Hudson & H. Niemi (Eds.). Quality assurance and teacher education: International challenges and expectations. Oxford: Peter Lang.
- Niemi, H., Toom, A., & Kallioniemi, A. (2012). Miracle of education: The principles and practices of teaching and learning in Finnish schools. Rotterdam: Sense Publishers.
- OECD. (2013). PISA 2012. Results in focus. What 15-year-olds know and what they can do with what they know. Paris: OECD. Retrieved from <u>http://www.oecd.org/pisa/keyfindings/pisa-2012-</u> results-overview.pdf.
- Ouakrim-Soivio, N., Rinkinen, A., & Karjalainen, T. (Eds.) (2015). Tulevaisuuden peruskoulu. Opetus- ja kultuuriministeriön julkaisuja 8:2015. Sahlberg, P. (2011). Finnish lessons. New York: Teachers College Press.
- Simola, H. (2005). The Finnish miracle of PISA: Historical and sociological remarks on teaching and teacher education. *Comparative Education*, 41(4), 455–470.
- Statistics Finland (2016). Retrieved from http://www.stat.fi/index_en.html

Stronge, J.H., & Hindman, J. (2003). Hiring the best teachers. Educational Leadership, 60(8), 48– 52.

- Taajamo, M., Puhakka, E., & Välijärvi, J. (2014). Opetuksen ja oppimisen kansainvälinen tutkimus TALIS 2013. Yläkoulun ensituloksia. Opetus- ja kulttuuriministeriön julkaisuja 2014:15. Vahtivuori-Hänninen, S. H., Halinen, I., Niemi, H., Lavonen, J. M. J., Lipponen, L., & Multisilta,
- J. (2014). A new Finnish national core curriculum for basic education (2014) and technology as an integrated tool for learning. In H. Niemi, J. Multisilta, L. Lipponen, & M. Vivitsou (Eds.). *Finnish innovations and technologies in schools: A guide towards new ecosystems of learning* (pp. 33–44). Rotterdam: Sense Publishers.
- Williamson, M.E., & Walberg, H.J. (Eds.) (2004). Testing Student Learning, Evaluating Teaching Effectiveness.

Muotoiltu: englanti (Yhdysvallat)

Kentän koodi muuttunut

Muotoiltu: suomi

Muotoiltu: englanti (Yhdysvallat)