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2. THE SOCIETAL FACTORS CONTRIBUTING TO EDUCATION AND SCHOOLING IN FINLAND

The Finnish Education: Equity and Quality as Its Main Objectives

ABSTRACT

The chapter introduces the reasons why teaching and learning have a high priority in Finnish society and how teacher education support teachers' role to work as high quality professionals. The chapter provides a brief review of the historical and cultural movements that have had an influence on respect for education and learning in Finnish society. The chapter also provides a description of the Finnish educational system with the comprehensive school as one of its important element. The major reasons for the success of Finnish education are a combination of political will, purposeful efforts to promote equity by the educational system, high quality teacher education, teachers' professional and moral responsibility, and society's trust in the educational actors.

Keywords: teacher education, equity, educational system, teaching profession, teachers

INTRODUCTION

The Finnish education system has received attention from all over the world because of the great success of Finnish 15-year-olds in the OECD's PISA surveys in 2000, 2003, 2006, 2009, and 2012 (e.g. OECD, 2006, 2009, 2010, 2013). The knowledge and skills of Finns in problem solving, scientific, mathematical and reading literacy are representative of the highest level of international standards. Only a very few Finnish students are in the lowest PISA categories. Likewise, the differences of learning outcomes among schools are small. Major reasons for these high learning outcomes are a purposeful educational policy and the high standards of teachers. According to researchers (Schleicher, 2005; Välijärvi, 2004; Simola, 2005; Laukkanen, 2006; Niemi & Jakku-Sihvonen, 2006), the Finnish educational policy has aimed at equity in education and has promoted the common comprehensive school model. In the process, many important decisions have been made. One of those has been the decision that all teacher education, including primary school teacher education, was raised to the MA level (5-year programs). This chapter gives an overview of the major drivers of this policy, why they were taken, and

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how they have influenced educational practice and teachers' professional roles. In the beginning of the chapter there is a brief review of the historical and cultural movements that have influenced Finnish education. Thereafter the structure and major features of the Finnish educational system are introduced. Finally there is a description of the Finnish research-based teacher education and its major qualities.

Respect for Learning and Education in the Finnish Culture – Education of a Nation and Comprehensive Schooling for All

In Finland, the promotion of equity, learning and education is a central factor in our national history, which can be seen in the framework of cultural and historical background factors. Thus, in Finland we like to think that our success in the PISA surveys has been only a side product in the development of our educational system.

A major influential cultural background factor is the Finnish national identity. Having been first a part of the Swedish realm from 1249 to 1809, then from 1809 to 1917 existing as a Grand Duchy in the Russian Empire, Finland finally became independent in 1917. From the late 19th century onwards, a strong Finnish nationalist movement, known as the Fennoman movement, grew. Milestones included the publication of what would become Finland's national epic, the Kalevala, in 1835, and the Finnish language achieving equal legal status with Swedish in 1892. The stories of the Kalevala tell about strong individuals whose power was based on mental abilities and wisdom, not on physical strength. The national movement in the 19th century was inspired and promoted by many influential university professors who, apart from working in their areas of expertise, also had political power. They strongly advocated the education of the nation. Especially J.V. Snellman (1806– 1881), philosopher, statesman and later also Head of the Bank of Finland, stressed the value of education and learning for the nation. The main message of representatives of the Finnish national movement was the education of a nation. The power of the nation depends especially on competent leaders, quality civil servants and teachers. Teacher education was seen as a necessary means for national education. Teacher education has had a close relationship with universities since its beginnings in the 19th century. The first teacher education seminar was established in 1863 and in 1866 the first decree for basic education was given. The most influential promoter of basic education was Uno Cygnaeus who created the main guidelines for education for all children and developed the first teacher education models. In 1852 the first professorship in education was established at the University of Helsinki and it was closely related with teacher education and the role of education in society. It was the first professorship of education in the Scandinavian countries. The first advocates of a national identity put a strong emphasis on basic education. Respect for learning and education provided also the possibility of elevation from the lower strata of society. Historically, many teachers had peasant family backgrounds.

Respect for learning and teachers' work has long historical roots in Finland and has been a deep cultural feature in Finnish society. Teachers were considered to be

important persons in local communities. They were often responsible for cultural activities in villages when a six-year basic education became compulsory for all children in 1921. Teachers were called "candles of the nation" and very often they educated the whole village and people in local regions by organizing choirs, theatre performances and parental education in addition to their normal school work. This education process was strongly supported by the Finnish Lutheran Church that had demanded literacy as a basic requirement for obtaining permission to marry since the 15th century until the school system in society took responsibility for basic education and literacy.

Educational Policy for Equity

After the Second World War the baby boom increased the number of pupils in the 1950s. At the same time the concept of a welfare society emerged. Education was seen as a basic factor for equity in society. An important part of this process was the ideal that free education is a basic right for all citizens. At the time, there was a wide consensus between politicians that a small country has to promote equality in education by implementing a system that provides educational opportunities for as long as possible to all those who are motivated to learn, regardless of their socioeconomic status, gender or residence. In those days Finland had a parallel system in education in which ten-year-old children had to decide what would be their future prospects and careers. They had to seek entrance and pass examinations into academically oriented schools or go on a route that led to vocational fields. If they selected the vocational route they could not seek entrance to higher education. The educational system put individuals into one of two categories at a very early stage of their lives, thus creating a divided nation. The academic schools very often had tuition fees, which further strengthened the divide.

Moving to a new school system that would be the same for all children was not an easy process in spite of a common general vision of the importance of education. After a very contradictory and hard political debate in the 1960s, it was decided in 1968 that the parallel school system should be replaced by a national nine-year basic education that would represent the ideology of comprehensive education. When the Government delivered its bill to Parliament in 1967, one of the arguments for the common nine-year education for all was that it was too early to judge individual capacities after students had only had four or even six years of basic education. In the beginning of the new school system, streaming was allowed but it was abolished in the 1980s because of unwanted consequences. It did not increase learning outcomes but strengthened the divide between different learners. In the 1970s and 1980s the comprehensive school was a very centralized system. It was a time when a new concept of pedagogy had to be developed and teacher education was radically reformed. In the 1980s a general decentralization in all administrations was implemented in Finland and also in educational policy. It gave more freedom as well as responsibility to local educational providers. The teacher education system was

also developed to provide new teachers with better competences to meet the whole age cohorts and to take more responsibility for curriculum development. During the 1980s and 1990s there were many political debates about the relevance of the common comprehensive school for all. Critical voices demanded more attention, especially for gifted children. However, the comprehensive school model remained. The main policy was that the comprehensive school could have different profiles locally and support students' individual qualities without streaming or separate schools, e.g. for gifted pupils.

Since the late 1960s, Finnish basic education has been logically developed towards the comprehensive model, which guarantees everybody equal opportunities in education irrespective of sex, social status, ethnic group, etc., as outlined in the constitution. The Finnish educational policy has purposefully aimed at equity in education, and this has been seen as the main reason for its good learning outcomes (Schleicher, 2005; Välijärvi, 2004; Simola, 2005; Laukkanen, 2006; Niemi & Jakku-Sihvonen, 2006). Finland has built up an education system with the following characteristics: uniformity – free education, free school meals and special needs education. The principle of inclusion has been an important guideline. Since the 1980s, all Finnish students in basic education began to have the same goals in mathematics and foreign languages. In so doing, the Finnish Government was realistic. In reality, these goals are attained by individuals with different levels of success. However, with extra support for the weakest students, we can considerably raise the performance of the whole age group.

Laukkanen (2006) summarizes the most important decisions as: (1) the discontinuation of streaming, (2) the strong allocation of affordable educational resources to lower secondary education, (3) the decentralization of decision-making powers, (4) raising primary school teacher education to the MA level, (5) providing support for weak students, and (6) inviting different stakeholders to express their opinions.

THE STRUCTURE AND AIMS OF THE EDUCATIONAL SYSTEM

In today's Finland (population 5.4 million) education is a public service. General education, vocational education and higher education are free of charge. All political parties see the comprehensive school model as an important investment for the future and defend even free higher education, even though there is pressure to set tuition fees for higher education from some business sectors. Basic education consisting of nine years of comprehensive school, upper secondary education and vocational education are financed by the state and local authorities. These educational services are provided by local authorities, which are municipalities or consortiums of municipalities. They have councils for strategic planning of educational issues and are responsible for the quality of education in local schools. Municipalities (local authorities) and their schools write their own curricula on the basis of the national

core curriculum. Local needs can be taken into consideration in these curricula. Schools can have their own profiles such as, e.g., science or music education.

Preschool education, mainly provided by social authorities in day-care centers, is offered for all six-year-olds. It has been an optional choice for families since August 2000, and almost the entire age cohort, about 96% of the age group, participated in preschool education. In 2015 it became obligatory for all children. Basic education lasts for nine years. The age group contains 60,000 pupils. Children start this compulsory schooling at the age of seven. In the comprehensive schools, class teachers are mainly responsible for grades 1-6, and most of the subjects are taught by subject teachers in grades 7–9 (also called lower secondary school). In basic education, students get all their study materials and one meal for free from the school. All students living five km or farther from their schools have transportation to and from school arranged by their education providers. For the Swedish speaking population (about 6%) there are separate schools as well as administrative services. The aim of immigrant education is equality, working bilingualism and multiculturalism. The goals of immigrant education are to prepare immigrants for integration into the Finnish education system and society, to support their cultural identity and provide them with a functioning bilingualism so that in addition to Finnish or Swedish, they have a command of their own native language (Finnish National Board of Education, 2009; Jakku-Sihvonen & Niemi, 2007).

Upper secondary schools usually obtain their students from many local comprehensive schools. After compulsory education at the age of 15, about half of the age group choose to go to upper secondary schools, which have academically oriented curricula and prepare students for higher education. Students who, at the end of upper secondary education, obtain passes in four matriculation exam subjects are awarded matriculation certificates, which provide eligibility for universities and vocational higher education. The other half of this age group chooses a vocational school. They also have access to universities and vocational higher education. Teachers at the lower and upper secondary schools are called subject teachers. They have qualified to teach one or two academic subjects (Finnish National Board of Education, 2009; Jakku-Sihvonen & Niemi, 2007).

The Higher education sector consists of universities and polytechnics, which now are mostly known as universities of applied sciences. The universities provide B.A., M.A. and Ph.D. degrees and have also rich variety of Open University programs and a wide provision of further education and in-service training. Polytechnics offer B.A. degrees and professionally oriented M.A. programs and also a lot of in-service training. All degree programs in higher education are free of charge. Open University programs have small registration fees and in-service training is fee based. Universities or polytechnics have entrance examinations because of the Numerus Clausus, this is a quota in each discipline that is based on negotiations between the higher education institutions and the Ministry of Education and Culture. They agree on how many degrees each institution can award over a fixed

time period. Funding is not dependent on the intake of students but outcomes and productivity. The numbers of degrees are based on the anticipated needs in society. This means that not all applicants can be accepted to higher education institutions, and competition is pretty fierce. Usually less than one fourth of the applicants can be accepted to universities.

Teacher education for teachers in comprehensive schools and upper secondary schools, as well as for those teachers who teach general subjects in adult education and vocational education, is provided at eight Finnish comprehensive universities around the country. According to previous decrees issued in 1979 and 1995, and the new 2005 decree, all candidates have to obtain a Masters degree to become a qualified teacher.

Usually less than one forth of applicants can be accepted into universities (Kansanen, 2003; Niemi & Jakku-Sihvonen, 2011). Teacher education, especially class teacher education, is one of the most desired study programs. Because of the large numbers of applicants for class teacher education, only 10–15% of the highly motivated and talented applicants can be accepted. Also, secondary teacher education has become more and more popular in most subjects. In general, admission to the university is difficult for young people wishing to pursue a career as a subject teacher as only a small percentage of the applicants are granted admission to the university department of their choosing. This is true particularly for biological subjects, but recently there have been problems in recruiting talented students in mathematics, physics, chemistry and some foreign languages. There have been many efforts to attract new students and this has resulted in a change from the "elimination approach" to a "recruitment approach" in the organization of the student admission programs of the faculties. These efforts include utmost flexibility in the timing of studies and arranging entrance tests in some departments occasionally as often as three times a year (Meisalo, 2007, p. 172). Pedagogical studies of subject teachers are normally undertaken in the individual study plans of teacher students in the middle of subject studies, e.g., during the third and fourth study years. However, it is possible to transfer from a Master's degree program at a subject faculty to pedagogical studies afterwards, by taking an entrance examination for pedagogical studies. All students applying for teacher education programs are tested and interviewed individually (Meisalo, 2007, p. 172).

One of the aims of the Finnish education system is to have an educational infrastructure that is devoid of so-called "dead-ends". The compulsory education is the nine years of comprehensive school, but the national aim is to keep all children in connection with the educational system for at least 12 years and to provide several routes for life-long learning after that. The aim of the educational system is to enable an individual's education to continue. Nearly 100% of each age cohort completes the nine years of comprehensive schooling. Ninety-four per cent of those who finish the ninth grade of comprehensive school continue their studies in the same year either in upper secondary general school or upper secondary level vocational education (Statistics Finland, 2009). The six per cent of the age cohort

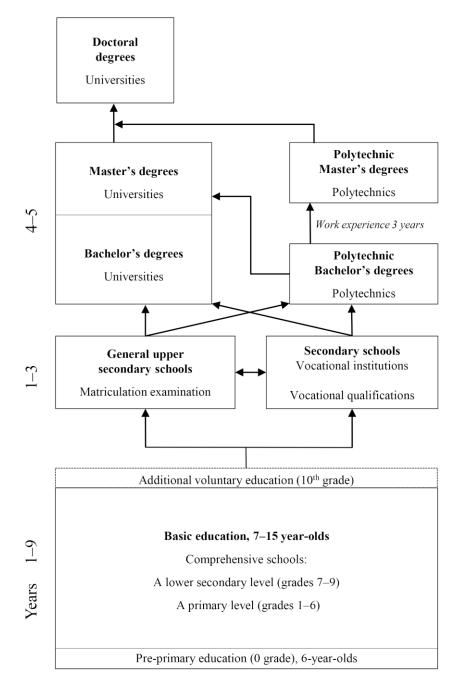


Figure 1. The educational system in Finland

who do not continue their studies are in danger of exclusion. Municipalities have launched various programs to keep them in touch with education and learning so that they will be able to find pathways to further education. Without additional education they are in danger of being excluded from the labor market. The aims related to equity and the enablement of all people's development through learning and education set special requirements on teachers, the teaching profession and teacher studies at universities.

An inclusion policy and special needs education are extremely important in promoting all students' right to learn. The basic principle is that all students with learning difficulties must be given help and support to overcome these difficulties. They can have extra teaching hours or/and special needs instruction integrated into their own class, and temporary or more permanent help in special classes or groups. In each school there is a multi-professional student care group to which the principal, teachers, special need teachers, social workers, and nurse belong. In 2011 a new decree was passed. Accordingly, every teacher is responsible to identify students' learning difficulties at the earliest stage possible (Finnish National Board of Education). This widens teachers' and local level responsibility to seek solutions for supporting these students. Inclusion has been the main principle in the last decade and this new law strengthens this trend.

In Finland, the teaching profession has been based on high moral and ethical principles for as long as teachers have been educated, i.e. for more than 150 years. This conception has continued undiminished after teacher education was moved to the universities in the 1970s (Niemi, 2011; Niemi & Jakku-Sihvonen, 2010). As an initiative of the national Teacher Union an ethical committee for the teaching profession was established in 2000. It is an independent organ and its main purpose is to advance the ethical nature of the teaching profession. The first ethical principles were published in 1998 (Ethical Committee for the Teaching Profession, 2002, pp. 164–167).

The principals of Finnish schools have an important role to play. They are qualified teachers with extra studies in management and leadership of school organizations. They have administrative tasks but they are also pedagogical leaders. Most of them have at least a small teaching load in order to keep in touch with grass root level issues. All teachers are also considered leaders in their own special areas and are expected to make active contributions to curriculum development.

ENHANCEMENT-LED AND FORMATIVE EVALUATION POLICY FOR PROMOTING QUALITY

A quest for good learning outcomes is on the educational agenda of many countries. Globally, much controversy exists over what is the best way to use assessment as a tool to achieve high learning outcomes. Some countries have chosen standardized testing, which stresses competition between schools and focuses on measurable performances. Other countries have applied more formative aspects of evaluation. he Finnish choice has been enhancement-led evaluation at all levels of education. The assessment of outcomes is regarded as an important tool to improve education.

There is no inspection system to control the educational arrangements at schools or institutions. Instead of inspection, there is an evaluation system. For basic education, following up whether schools have reached the national goals for learning outcomes set in the national core curriculum for basic education is done by national sample based assessments. Upper secondary schools have their own standards based end examination system.

Since the mid 1990s, the Finnish National Board of Education conducted national assessments of learning outcomes, mostly in the ninth grade of basic education. In 2014, this task was moved to the Finnish Educational Evaluation Centre (http://karvi.fi/en/). Regular assessments have been carried out in mathematics, the students' mother tongue (either Finnish or Swedish) and literature, and occasionally in other subjects as well. National assessments produce information about the quality and results of education and training in relation to objectives stated in the national core curricula. These assessments are sample based and thus do not cover the whole age group. This is because the results are used for the development of education. The purpose is to enhance the use of evaluation for formative purposes. All schools in a sample of an assessment receive an individual feedback report. These reports are delivered to schools as soon as possible after the assessment data has been collected, as fresh results are more interesting for schools than results that are months old. Feedback has usually been received as early as two months after the data was collected (Laukkanen, 2006).

The Ministry of Education and Culture is responsible for general policy making and financing educational evaluations. The Finnish Educational Evaluation Centre (http://karvi.fi/en/) is responsible for evaluating general education, vocational education, and adult education as well as higher education. The center is an independent expert body assisting schools and other educational institutes including universities and polytechnics with matters relating to evaluation and quality assurance systems and providing information to the Ministry of Education and Culture and other policy makers. Beside the national evaluations, international evaluations are important in developing Finnish education. Since 2000, PISA has provided important information for the development of Finnish basic education (Jakku-Sihvonen & Niemi, 2007, p. 14).

At the local level, municipalities are encouraged to produce internal and external evaluations to develop education. Policy-makers are informed about the status of education by assessments and special up-to-date reports organized by the Ministry of Education and Culture, and the Finnish National Board of Education. Evaluations are implemented to find evidence to support the continuous development of education and learning. The aim of the national evaluation system is to support the local/ municipal education administration and the development of schools as goal-oriented and open units, and to produce and provide up-to-date and reliable information on the context, functioning, results and effects of the education system.

Balancing between a Centralized and Decentralized Administration

Finland has also balanced between a centralized and decentralized administration of education. At the beginning, comprehensive schools were very centralized, but in 1985 the municipalities' freedom and responsibility was increased. The status of the then new national curricular guidelines was to create a framework for curriculum design in the municipalities (e.g. Laukkanen, 2006). Ten years later, in 1994, the Finnish National Board of Education only gave very broad aims and content guidelines for teaching different subjects. The municipalities and, ultimately, the schools set up their own curricula on the basis of the national core curriculum. Since 1999 new legislation has been provided to mainstream decentralization. Providers of education – meaning municipalities, coalitions between municipalities and private foundations – have been given wide freedom when it comes to writing their local curricula. Still, the local curricula have to be drawn up in accordance with the National Core Curriculum for both comprehensive and upper secondary schools.

The local curricula have to determine the teaching and educational practices of the schools concerned. The curricula must be drawn up in such a way that they take into account the schools' operating environments, local value choices and special resources. Education providers may decide about the implementation of curriculum in co-operation with interest groups. The aim is to ensure a high standard of general education, with relevance to society and commitment from the community as a whole to the jointly determined objectives and procedures. As it concerns pupil welfare and home-school cooperation, the curriculum must be drafted in collaboration with authorities charged with tasks that are part of the implementation of the local authority's social and health services (Finnish National Board of Education, 2014, 2015).

TEACHER EDUCATION AS A KEY PLAYER

In Finland, the responsibility for providing education to prospective teachers in primary and secondary schools has been transferred to universities. Since 1974, teacher education for all teachers in basic education has been arranged at universities. Before 1974, primary school teachers were educated at teacher-training colleges. In 1979, the basic qualification for secondary and elementary school teachers was defined as a Master's degree obtained in programs requiring 4 to 5 years to complete. The purpose of this modification was to unify the core aspects of elementary and secondary school education and to develop an academically high standard of education for prospective teachers. Teacher education for the secondary school level was also reformed by expanding the scope of pedagogical studies (Niemi, 2010; Niemi & Jakku-Sihvonen, 2006).

According to decrees issued in 1979 and 1995, all teachers had to obtain a Master's degree for teacher qualification. In terms of the Bologna process,

the degree of qualified teachers was equivalent of a second cycle degree in the European higher education area. As part of the Bologna process, teacher education in Finland moved to a two-tier degree system on 1 August 2005. The combination of a three-year Bachelor's degree and a two-year Master's degree in appropriate subjects qualifies teachers to teach subjects in primary and secondary schools or general subjects in vocational institutions. Since moving to the Bologna process the kindergarten teacher's degree has to be Bachelor in Education (180 ECTS); all other teachers must attain a Master's degree (BA 180 + MA 120 = 300 ECTS; 1 ECTS is about 25–28 hours work). Teachers for vocational schools study their vocational subjects in higher education institutions (e.g. technological universities), which are specialized in vocational content areas. All other teachers are educated in comprehensive universities.

The main elements of all teacher education curricula consist of studies in:

- Academic disciplines. These can be whatever disciplines are taught in schools or educational institutions or in science of education. Academic studies can be a major or minors depending on the qualification being sought. Class teachers have a major in educational sciences and minors in other disciplines.
- · Research studies consist of methodological studies, a BA thesis and an MA thesis.
- Pedagogical studies (min. 60 ECTS) are obligatory for all teachers. They also include teaching practice.
- Communication, language and ICT studies are obligatory.
- The preparation of a personal study plan has been a new element in university studies in Finland since 2005. Its main function is to guide students to develop their own effective programs and career plans, and to tutor them in achieving their goals.
- Optional studies may cover a variety of different courses through which students seek to profile their studies and qualifications.

Pedagogical Studies

The traditional distinction between class teachers and subject teachers has been retained but the structures of the respective degree programs allow them to take very flexible routes to include both in the same program or permit later qualification in either direction. The pedagogical studies (60 ECTS) are obligatory for qualification as a teacher and are approximately the same for both primary and secondary teachers as well as vocational and adult education teachers. These studies give a formal pedagogical qualification to teachers at all levels in the Finnish educational system regardless of the programme in which they are provided. According to legislation, pedagogical studies must be studies in the science of education with an emphasis on didactics. The pedagogical studies can be part of the degree studies, or they can be taken separately after completion of a Master's degree.

Universities have a high degree of autonomy in designing their curricula. Therefore, no detailed "curriculum of teacher education" covering all universities in Finland

can be presented. However, there are some principles and general outlines followed by all institutions of teacher education. These are partly due to recommendations by the Ministry of Education, partly by national working groups, e.g., related to teacher education reforms such as the Bologna and partly to an agreement of the Deans of the Faculties of Education and the Directors of the Departments of Teacher Education who have regular contact with each other and with the Ministry. The Ministry of Education has full confidence in the departments and faculties involved in teacher education (Meisalo, 2007, p. 163).

The main principles of the Finnish teacher education system can be summarized in the following way.

A Research-Based Approach as the Main Guideline

For decades, the Finnish orientation toward teacher education has committed itself to the development of a research-based professional culture (Niemi & Jakku-Sihvonen, 2011; Jakku-Sihvonen & Niemi, 2006). The critical scientific literacy of teachers and their ability to use research methods are considered to be crucial. Accordingly, Finland's teacher education programs require studies of both qualitative and quantitative research traditions. The aim of these studies is to train students to find and analyze problems they may expect to face in their future work. Research studies provide students with an opportunity to complete an authentic project, in which students must formulate a research question in an educational field, be able to search independently for information and data, elaborate on their findings in the context of recent research in the area, and synthesize the results in the form of a written thesis. They learn to study actively and to internalize the attitude of researchers as they do their work (Niemi, 2011).

Professors have the responsibility to guide students in the research-oriented aspects of their education. The main object of this guidance is not the completion of the Bachelor or Master thesis itself, but actually to engage students to become active participants of education society. In this aspect of the degree program, the processes of active working and thinking are integrated in various complex and sometimes unexpected ways. The aim of the guiding process is to help students to discover and tap into their own intellectual resources and to enable them fully to utilize the resources of the study group in which they are working (Nummenmaa & Lautamatti, 2004, 117).

The goal of Finnish TE is to equip teachers with research-based knowledge and with skills and methods for developing teaching, cooperating at school and communicating with parents and other stakeholders. The leading guidelines are:

 Teachers need a deep knowledge of the most recent advances of research in the subjects they teach. In addition, they need to be familiar with the latest research concerning teaching and learning. Interdisciplinary research on subject content knowledge and pedagogical content knowledge provides the foundation for developing teaching methods that can be adapted to suit different learners.

school leachers (class leachers) (Wemi & Sakku-Sinvohen, 2000)				
<i>Bachelor</i> 's degree 180 ECTS	<i>Master</i> 's degree 120 ECTS	TOTAL		
25 (including supervised teaching practice)	35 (including a minimum of 15 ETCS supervised teaching practice)	60		
35 (including a BA Thesis, 6–10)	45 (including a MA Thesis, 20–40)	80		
60		60		
25	0–35	25–60		
35	5-40	40–75		
	Bachelor's degree180 ECTS25 (including supervised teaching practice)35 (including a BA Thesis, 6–10)6025	Bachelor's degree 180 ECTSMaster's degree 120 ECTS25 (including supervised teaching practice)35 (including a minimum of 15 ETCS supervised teaching practice)35 (including a BA Thesis, 6–10)45 (including a MA Thesis, 20–40)60250–35		

Table 1a. Main components of the teacher education programs for primary school teachers (class teachers) (Niemi & Jakku-Sihvonen, 2006)

Table 1b. Main components of the teacher education programs for secondary school teachers (subject teachers) (Niemi & Jakku-Sihvonen, 2006)

Secondary school teacher education program	Bachelor's degree 180 ECTS	<i>Master</i> 's degree 120 ECTS	TOTAL
Subject teacher's pedagogical studies (minor)	25–30 (including supervised teaching practice)	30–35 (including a minimum of 15 ETCS supervised teaching practice)	60
Academic studies in different disciplines (major)	60 (including a BA Thesis, 6–10)	60–90 (including a MA Thesis, 20–40)	120–150
Academic studies in different disciplines (1–2 minors)	25-60	0–30	25–90
Language and communication studies including ICT, optional studies	35-40	0–30	35-70

ECTS means European Credit Transfer System (also called The European Credit Transfer and Accumulation System): 1 ECTS = 28 hours of students' work in studies including lessons, contact hours, examinations and all independent and collaborative activities, BA = 180 ECTS, MA 120 ECTS

- Teacher education in itself should also be an object of study and research. This
 research should provide knowledge about the effectiveness and quality of teacher
 education implemented by various means and in different cultural contexts.
- The aim is that teachers internalize a research-oriented attitude towards their work. This means that teachers learn to take an analytical and open-minded approach to their work, that they draw conclusions based on their observations and experiences, and that they develop their teaching and learning environments in a systematic way.

The Social and Moral Code of the Teaching Profession

Teachers' work is context-bound, depending on learner age level, cultural conditions, available resources and the contents that they are mediating to learners. Teachers and teacher education are clearly related to national goals and purposes. The welfare and economy of the society are related to the quality of educational outcomes, which are associated with teachers' competences. Besides being guided by national and local community-based goals, teachers' work also has more generic aims. Teachers open doors and windows to cultural enrichment and help people to understand other human beings and their cultural contexts. Teachers are key actors in promoting human rights, justice and democracy in a global world (e.g. Aloni, 2002; Niemi, 2008a). In Finland the school law contains values that promote these aims. Teachers are expected to implement them in their daily work. Since 2000, Ethical Council for the Teaching Profession has worked to promote teachers' ethical awareness. Also teacher education programs emphasize teachers' social and moral responsibility. A survey in 2010 showed that Finnish student teachers are committed to the teaching profession and are aware of the ethical basis of teaching (Niemi 2011).

Integration of Theory and Practice

Teachers' pedagogical studies include supervised teaching practice (approx. 20 ECTS). The aim of guided practical studies is to support students in their efforts to acquire professional skills in researching, developing and evaluating teaching and learning processes. In addition, teacher students should be able to reflect critically on their own practices and social skills in teaching and learning situations. During their supervised practice periods, student-teachers meet pupils and students from various social backgrounds and psychological orientations and have opportunities to teach them according to the curriculum.

Teaching practice is integrated with all levels of TE time. It is supervised by university teachers, university training school teachers or local school teachers depending on the phase of practice (Jyrhämä, 2006) (Figure 2).

The main principle is that practice should start as early as possible and support student teachers' growth towards expertise. At the beginning it guides student teachers to observe school life and the pupils from an educational perspective,

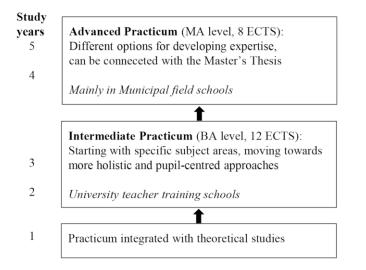


Figure 2. Teaching practice in the Finnish teacher education curricula

then it focuses on specific subject areas and pupils' learning processes. Finally it supports student teachers as they take holistic responsibility in their teaching and schools. This period can be tightly connected with their research studies and master's dissertation.

Universities' teacher training schools (so-called "Normal schools") play a crucial role in the Finnish teacher education. The Normal Schools are state schools and their teachers have a different status than teachers in other schools. The teachers have a dual role: on one hand they teach pupils and on the other, they supervise and mentor student teachers. Many of the Normal School teachers are active in research and development and are members of teams that produce learning materials for schools.

There is also frequent critique based on the demand of having at least a substantial part of the teaching practice in more typical schools. Actually, parallel to the Normal Schools there have been so-called field schools with an important contribution to the capacity and volume of teacher education in the times of high demand of qualified teachers (Meisalo, 2007, p. 167).

TEACHERS AS PROFESSIONALS – TRUST IN UNIVERSITIES AND TEACHERS' WORK

Teachers in Finland are representatives of a high-quality academic and ethical profession. Teachers have to take an active role in raising serious questions about what they teach, how they teach, and the larger goals for 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. They also have to be active in public debates and decisions affecting the development of schools and education. As professionals, teachers cannot only be implementers of decisions, but must also be partners in their development. Teachers are expected to be able to take an active role in evaluating and improving schools and their learning environments. They are also expected to refresh their professional skills, to cooperate with parents and other stakeholders, and to be active citizens (Teacher Development Education Programme, 2001).

Universities do not give any certificate of teacher qualifications. They only provide the education and training required to fulfill the demands that are needed for teacher qualifications. At graduation, students are given a certificate for their university degree. Students can choose between different options for their own teaching career, and there are a variety of possible degrees that qualify them as teachers. Employers or, in the Finnish case, municipalities, require that a teacher candidate has completed all the studies required by law for the teaching profession and the teacher qualification. Universities are autonomous and can provide different profiles in teacher education. Universities negotiate every three years with the Ministry of Education on their strategic plans and results in teacher education.

Finnish teachers are recognized as professionals, and the teachers' trade union considers this status to be very important. Almost all teachers belong to the same teachers' trade union (OAJ), which is a very powerful agency. It has been invited to play an active role as a partner in all major reforms of teacher education and school curriculum in recent decades. It has also promoted the policy of the master's degree as teachers' basic qualification. Finland has no inspectorate, no probation time for newly graduated teachers' or national school achievement testing. Finnish society considers teachers to be professionals who are morally responsible for their work.

The society's trust in universities' degrees as well as teachers' competences is mediated via trust in the universities and makes them very accountable. Trust is not a stable and permanent status. Results and quality must be assessed and evaluated systematically. Therefore universities' own quality assurance methods are important (all Finnish universities will be audited by 2011). Teacher education has also been evaluated several times nationally and internationally in the last two decades. Evaluations have been enhancement led and their purpose has been to produce improvements in teacher education. There is a close cooperative relationship between universities and the Ministry of Education in teacher education issues. Many research projects into teacher education have been also carried out jointly. The recent recommendations from the Ministry of Education stress the importance of strengthening research in and on teacher education. The Ministry of Education also requires universities to reorganize conditions for teacher education research.

CONCLUSION

The OECD review team looking at equity in the Finnish education system (OECD, 2006, 48) expressed the view that the Finnish strategy has taken a long time to mature and is composed of several interrelated issues. The team writes: "This is a complex of practices that has emerged over time, but it must be maintained since any weakness in one component will undermine other practices." The miracle of the Finnish education is an outcome of a purposeful policy and practice. The educational system and teacher education have together supported the aims of equity and teachers' professional autonomy. There are a number of reasons that all together have resulted in high learning outcomes. Many of those factors are mutually dependent and interconnected. If any one of the factors is dramatically changed, it may affect the whole. The success is based on the combination of political will, purposeful efforts to promote equity by the educational system, high quality teacher education, teachers' professional and moral responsibility, and society's trust in the educational actors.

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