Beyond PISA

Building a World-Class Learning System in Finland

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Table of Contents

Preface

Our goal with this report is to tell the story of Finnish education in a way that allows the reader to weigh the wider socio-historical factors against the more specific education system-related factors commonly understood to explain Finland's rise and partial fall from its status as 'best-ever' education system. While we do not mean to diminish the relatively high and equal outcomes of the Finnish education system, we believe there are limits to the narrower education system-centered explanations for Finland's success offered in the years after the first OECD (Organisation for Economic Cooperation and Development) PISA (Programme for International Student Assessment) results—known as the Finnish "PISA miracle." We do not want to imply that all earlier explanations of Finnish success have lacked a socio-historical perspective or that the authors of those explanations deliberately led the public astray; many of the excesses and outright misinterpretations in public discourse on this subject may be due instead to the over-simplification of complex ideas that so often accompanies their widespread dissemination.

This report is the result of an assignment from the Washington, DC-based National Center on Education and the Economy (NCEE) and the Australian Council for Educational Research (ACER), aiming to investigate the education systems of a group of countries or jurisdictions that have fared well in international comparative assessments. Our aim has been to offer a general view on issues that we as researchers of education deem critical for understanding the current state of Finnish education, including the international attention it gained after Finnish students' success in the early PISA studies, its particular strengths, and its current and future challenges.

We know well that the "Finnish story" can be written in as many ways as there are authors, and like all authors before us, we have been forced to leave out numerous discussions we would have liked to include, either as part of the existing chapters or as additional chapters. On the other hand, we admit that no history of a country's educational system or explanation for its good or poor outcomes can ever be comprehensive. Accordingly, we will be satisfied if this report enriches the reader's understanding of the Finnish education system and prompts further discussions of its strengths and weaknesses and possible remedies for at least some of its most critical challenges. Maybe most critical among these challenges, and a topic we will return to many times in this report, is Finland's lack of clear learning standards and reliable data on learning outcomes. We are well aware that many previous interpretations of Finland's international success have presented the lack of clear standards, and especially of standardized testing, as assets. Yet with Finland's recent decline in learning outcomes, the lack of

reliable data has made it much harder to correct course. Andreas Schleicher summed up the problem neatly: "Without data, you are just another person with an opinion" (Hautamäki et al. 2008). In its first official effort to address the issue of learning standards, Finland implemented new assessment criteria starting in 2022; only a careful follow-up will show whether the criteria have succeeded in providing comparable expectations for students' learning and for grading across schools. As we will discuss, this endeavor is complicated by a strong Finnish reservation about marking the end of comprehensive school—the treasured foundation of the education system—with an exit exam.

It is also worth noting that the writing of this report coincided not only with the COVID-19 pandemic, affecting education worldwide, but also with key reforms within the Finnish education system. In December 2020, just as we were finishing a draft of this report, the Finnish Parliament passed a law extending compulsory education to include upper secondary education, effective autumn 2021. Until that point, 95 percent of the age cohort had voluntarily attended secondary school. Our report primarily reflects the system when enrollment in secondary school was voluntary, with some discussion of the new law where necessary. In addition, a reform regarding higher education admission in 2018 reinforced the role of the matriculation examination, the only high stakes test in the Finnish education system taken at the end of upper secondary school, in determining admission. This means that even if Finland continues to resist an exit exam at the end of comprehensive school, upper secondary students face increased stakes on the matriculation exam. A third issue with potentially severe repercussions for the whole education system is a large-scale reform underway regarding the structure and organization of Finland's Social and Health Services (SOTE). The reform has been on the agenda of two governments and the proposed model of a new mid-level governance for SOTE might leave education as the only major sector of public services left to municipalities with diminished financial resources.

All of the above changes were underway before the COVID-19 pandemic disrupted schooling throughout 2020 and 2021. The pandemic accelerated further changes to schools as well. It shone a spotlight on the central purpose of schools to ensure the wellbeing of children through their role as social centers and as providers of health and mental health supports, nutrition, and enrichment. The pandemic has also led to an acceleration of efforts to build an infrastructure for digital learning, something that had not yet been embraced at the national level.

Overall, regarding the difficulties embedded in any attempt to compile a concise report on issues both complex and politically loaded, we would like to cite a colleague's introduction to his PhD thesis on the Nordic countries' policies regarding the publicizing of school performance indicators:

> *In this research, I have consciously taken a critical stand towards the Finnish QAE (Quality Assurance and Evaluation) policy, the policy discourse and its embedded rationalities. To inform the reader, a critical*

> *approach does not automatically imply criticism, yet I fully understand the potential misreading of this—the topic is highly delicate and emotive, especially within the educational sector. My approach has not been the most conventional in that sense, especially as the Finnish comprehensive school system has become the source of national pride. Thus, I want to underline that my aim in this research is not to take a normative stand and to evaluate what policy ought to be practiced, but rather to go behind the "taken for granted," to scrutinise, and understand the elements and mechanisms through which the current publicising policy and its practices have institutionalised and are being legitimated in Finnish society. (Wallenius 2020, 5)*

As the quote from Wallenius indicates, Finnish education researchers have forged a strong consensus around the Finnish comprehensive school—what it is, how it is portrayed, and what are its strongest assets. This report challenges that consensus, and we may even surpass Wallenius' concerns around the *publicizing* of QEA results by questioning the adequacy of the QEA results in the first place.

We want to express our warm gratitude to Professor Emeritus Jarkko Hautamäki for his discussion and comments on the text. Any mistakes are purely ours.

Introduction

Finnish Basic Education wrote its way to international fame in 2000, with the performance of Finnish 15-year-olds on the first OECD (Organization of Economic Cooperation and Development) PISA (Programme for International Student Assessment) exam. At the time, many people might have struggled to locate Finland on the world map, but soon the "miracle" of the Finnish education system was on everyone's lips. Even more remarkable than the high average performance of Finnish students were the small share of weak students, the small variation between schools, and the small gaps in achievement between students from different home backgrounds.

Explanations for Finland's success appeared in numerous books and articles throughout the early 2000s (e.g., Chung 2015, 2019; Sahlberg 2011a, 2011b, 2014; Simola 2005, to name a few). In hindsight, it is surprising that Pasi Sahlberg's book *Finnish Lessons*, which became almost a bible for the growing number of PISA-tourists who flooded Finland to observe the "miracle" on site, came out only in 2011. Today, we can identify this as the time when the Finnish success had begun to abate. Six years earlier, in 2005, education scholar Hannu Simola had already started pushing back against the overtly educational or pedagogical emphasis of many of the standard explanations for Finland's success, emphasizing instead wider socio-historical factors. Despite this, Jennifer Chung's PhD thesis of 2009, which was mainly based on interviews with Finnish administrators, researchers, and other education stakeholders, cleaved to pedagogical explanations.

In 2015, Gabriel Heller Sahlgren took Sahlberg and other Finnish authors to task for claiming that education policies which took effect in 2000 were behind the success of students who aced the PISA in that same year but had actually been in school in the 1990s (Sahlgren 2015a). Despite some weaknesses in its argument, we see Sahlgren's treatise, widely disparaged in Finland, as a fresh opening in the discussion. A simple timeline shows that the 15-year-old students of PISA 2000 can hardly have been the products of Finnish education circa 2000. Nor could their teachers (mean age 44), who were themselves educated starting as early as 1957. Furthermore, almost all PISA-driven discussion of teacher education centered on classroom teachers, who teach primary grades, even though subject teachers who teach secondary education became the students' instructors starting in fall of 1997. In view of this, we find quite plausible Sahlgren's claim that many of the educational features "responsible" for Finnish students' success in 2000 might rather be seen as reasons for the decline of that success after 2006.

We also want readers to keep in mind that life is very different for today's 15-year-olds than it was for the first PISA cohort in 2000. In the national study that first showed a decline in Finnish students' learning outcomes and school engagement (Kupiainen et al. 2011) the authors identified many causes, including growing economic insecurity for a small minority of students, increasing disengagement from school caused by a range of societal issues, and increased stress related to the rising academic demands of a revised curriculum and tests. There were also questions about how the teaching force had changed over time given their more advanced and academic training and higher expectations, as well as the possibility of social media and digital gaming leading to disengagement with school and its requirements.

Many of the new features of the basic school curriculum introduced in 2014 (NCC 2014) can be understood as an effort to respond to the decline in student outcomes discussed in the 2011 report (Kupiainen et al. 2011). Whether those features will arrest the decline in performance or if some stronger actions will be needed (as some researchers and teacher educators interviewed for this report propose) remains to be seen.

This report follows the guidelines proposed by the NCEE and ACER:

In Part I, The History and Structure of Finnish Education, we present in Chapter 1 a concise history of Finnish education from Finland's time as an Eastern Province of Sweden until the end of the Russian period (1809–1917). As part of that chapter, we present the thinking of two men whose impact on Finnish education can still be felt regarding the role of education in society and the goals and aspirations of basic education. In Chapter 2, we cover the period from 1922, when Finland enacted its law on compulsory education, until the inauguration of the new comprehensive school in the 1960s. In Chapter 3, we discuss the comprehensive school reform of the 1970s, including the creation of basic school, an institution which has remained largely unchanged for the past fifty years. In Chapter 4, we present the structure of the current Finnish education system, and in Chapter 5, both past and present-day teacher pre-service education.

In Part II, The Learning System, we turn our attention to a range of vital factors critical for the functioning of the Finnish education system today. In doing so, we mainly focus on the basic or comprehensive school (grades 1–9), which until Parliament's recent law was the only compulsory part of the primarily public and free Finnish education system. In Chapter 6 we briefly present the guiding aspirations of the system from early childhood education to the tertiary level, followed by a description in Chapter 7 of the key levels of educational governance (national, regional, and municipal); the financing of pre-primary and basic education; and the dual-structure secondary education. In Chapter 8, we present and discuss the monitoring of learning outcomes, an arena in which Finland differs greatly from other countries. We examine the Finnish curriculum system in Chapter 9, including its role in the creation of the local curricula, and then return to the question of monitoring learning outcomes in Chapter 10, where we discuss how assessment and evaluation are implemented in schools and point

out some of the key problems issuing from the lack of comparable assessment across schools. In Chapter 11, we present some individual pedagogical features of the Finnish basic school that might also have contributed to the success—or the fall—of Finland's performance on PISA. Our goal is to offer the reader a peek into some of the more practical features of the education system, allowing a closer look at students' actual school experiences and educational aspirations than more formal documents can provide. In Chapter 12 we look at the Finnish model for support for learning and school engagement. This model is often put forward as an explanation for the relatively small number of weak Finnish students in the PISA studies—even if their share increased during later cycles. Lastly, in Chapter 13, we supplement Chapter 5's discussion on teachers and teacher pre-service education with some specific issues regarding Finnish teachers and school principals.

In Part III, we look at some of the key challenges we expect the Finnish education system to encounter in the future. Additionally, we briefly present the administrative documents most relevant to these challenges: the Ministry of Education and Science's *Education and Culture Strategy 2030*, the latest Government Future Report, the current Government Program, and the Educational Policy Report, which is currently only at the stage of stakeholder comments.

Finally, in the Epilogue, we discuss in greater detail those issues and viewpoints which we consider most important to understanding the success of Finnish students in international comparative studies, and also—and especially—to the further development of the Finnish education system and the basic school. With this report, we hope to enrich and maybe even partially correct the global understanding of Finnish education since 2000—an understanding powerfully shaped by the innumerable official and unofficial sources trying to paint a picture of Finland's path to that success. We hope this report will cast light on features of the system that, if amended, might restore Finland to the high scores it attained on PISA in the early 2000s—or at least stop the decline that began around that time.

PART I

The History and Structure of Finnish Education

The success story of Finnish education did not start with the first administration of PISA, or even with the comprehensive school reform of the 1960s and 70s. Finland has a long history of formal education, although it did not make education compulsory until 1921 and was among the last European countries to do so. Finland is also notable for its early focus on making education accessible to the lower social classes, which long preceded the adoption of the comprehensive school. In Part I of this report, we offer a brief look at the history of education in Finland across the centuries.

1

Finnish Education Under Swedish and Russian Rule

Finland achieved independence in 1917, meaning that much of its education system is rooted in the mores of Sweden (until 1809) and Russia (1809–1917). Formal education before 1809 was relatively limited and, except for private tutoring in the homes of wealthy landowners and itinerant religious teaching of the Catechism, available only in the few large towns. Only during the Russian period did the number of educational institutions begin to increase. Finnish language first appeared on the syllabus and was finally adopted as a language of instruction in 1857, a change which considerably widened the educational opportunities of the Finnish- speaking rural population.

Education Under Swedish Rule

In 1571, the first Swedish School Edict inaugurated formal education in Finland (then designated the Eastern Province of Sweden). At the time, there were only seven schools in Finland: Latin schools dating to the 1200s in Turku and some established later in Viipuri, offering three to four years of schooling to prepare clergy, as well as so-called children's schools in five other towns, providing one to two years of elementary education. When the Reformation closed Catholic cloister schools, the (small) Finnish bourgeoisie established grammar schools based on a German (i.e., not British) model, which also prepared their students for university. This close connection between grammar schools or secondary education and the university lasted until the mid-20th century, when the universities could no longer accommodate all students passing general upper secondary education.

Queen Christina's School Edict of 1620 formed a new type of school with the Latin-based name "trivial school" (*triviaalikoulu*). Trivial schools offered a four-to-eight-year program divided into lower and upper schools and mostly comprised a single room where all students worked in age-appropriate groups.

In 1630, the first gymnasium (upper secondary school), Collegium Aboensis, was established in Turku, with a curriculum based on the three upper years of trivial school. Ten years later, in 1640, Queen Christina commissioned the University of Turku. Later that decade, the education structure stabilized as follows:

1) a one-year elementary school (*pedagogio*); 2) lower and upper trivial school, with a higher track for students studying Latin and a lower one for those entering bookkeeping and related fields; and 3) gymnasium (upper secondary) which prepared students for university studies. To enter the gymnasium, students had to pass the trivial school. In trivial school, one teacher taught all subjects (writing, arithmetic, Swedish and Latin), like today's classroom teachers, while the gymnasiums had subject teachers. Instruction was in Swedish in trivial schools, in Latin in gymnasiums, and, for the first time, each class was to have a separate space.

At the beginning of the 1800s, Finland had one gymnasium, seven trivial schools (corresponding roughly to lower secondary education) and 14 elementary schools. In 1806, a separate track within the trivial school was established for the education of merchants and civil servants, which did not lead to university. In 1807, a pedagogical college was established in the Turku Academy for the education of teachers. That year also marked the first version of today's report card.

Autonomy Under Russian Rule 1809–1917

The annexation of Finland to Russia also affected the geographical center of gravity in the country. Turku, a medieval seaport town situated on the west coast, lost its status as capital when Helsinki, situated closer to St. Petersburg and with few ties to Sweden, was made the capital of the new Great Duchy in 1812. To elevate the town of just 4,000 inhabitants, the emperor ordered the creation of a new master plan with a town center built on the model of St. Petersburg. Next to the main Lutheran church and the Senate building, the new main square was to house the new University, moved from Turku to Helsinki in 1827 after a fire in Turku, as well as the University Library. Building from this core, Helsinki became a true capital; together with the rise of industry and commerce and the enlarging garrison, the population grew to 20,000 by 1840. Yet not until the early 1900s did the mostly working class, rural-origin Finnish-speaking population grow to equal the Swedish-speaking population. A trace of that division can still be seen in Finnish society and its education system, which still offers parallel services from early childhood education to tertiary education in the two languages.

The industrialization of Finland from 1860–1910, combined with population growth beginning in the 1870s after the Great Famine and continuing through independence and the ensuing Civil War, had extensive effects on the Finnish population, its mobility, and its living conditions, lasting far into independence (Lindström 2001). From 1870 on, mobility proceeded in two directions: to "America" and to towns, the latter causing increased differentiation between the rural and the growing urban Finland. Immigration to America reached its peak in the early years of the 20th century, with 230,000 people leaving in 1902 alone—a considerable share of a population well under 3 million. Immigration began from Lapland but expanded to all rural parts of the country. The outbreak of WWI significantly reduced immigration, further intensifying migration from the northern to southern regions of the country, from the rural to industrial centers and especially to the growing Helsinki region.

Despite the considerable losses to immigration, the Finnish population grew from the less than 2 million in 1870 to 3.3 million in 1920. However, in the still mainly agrarian Finland, population growth occurred primarily among poor people who were not represented in the Senate. Accordingly, in the 1890s, almost three quarters of the population lacked any legal rights, living mainly on small farms across the sparsely populated countryside with poorly maintained roads, as the agrarian population had done for centuries. However, unlike in most of Europe, Finnish farmers were free, even if many also worked for the few manor houses and their noble or bourgeois owners.

Elementary Education

There were several reasons for the slow emergence of elementary education in rural Finland. In addition to the sparse population, general poverty, and the need for all family members to contribute labor on the farms, Swedish was the sole language of instruction in most schools, giving the Finnish-speaking rural population little incentive to educate their children beyond the itinerant church clerk's teachings of the Catechism.

After the middle of the 18th century, however, the situation began to change. Together with growing industrialization, commerce, and population mobility, liberal political ideas such as using Finnish as a language of instruction began to gain traction in the Senate. The new railways began to link the rural inland regions to the coastal towns, and the building of canals and a growing inland shipping industry further expanded mobility, tying the rural population increasingly to the society as a whole.

One of the important features of the history of Finland is that the main advocates of Finnish nationality and the Finnish language came from the minority Swedish-speaking upper class. They were the ones who first began to promote the Finnish language, as it was clear that national awakening and independence from Russia would not be possible without the power of the Finnish-speaking majority. It was equally clear, however, that no wider movement toward democracy was to be reached without economic growth and the systematic education of the mainly agrarian Finnish-speaking population. Finally, the Senate approved a decree on public elementary education in 1866.

The 1866 Elementary School Decree set no specific requirements for either institutions or students. The first motion toward compulsory education was the Decree on Education Districts (*piirijakoasetus*) in 1898. The decree stated that except for sparsely populated areas, municipalities had to offer sufficiently broad elementary networks that no child be required to travel more than 5 kilometers to school. Yet, the decree did not make education compulsory as the establishment of schools was tied to the number of children willing to attend (30 for one district). Although attendance remained voluntary, the number of schools, teachers and students increased considerably from 1886–1905, even during the economic recession caused by the Great Famine. Municipalities

were responsible for maintaining schools and providing living quarters for teachers, as well as at least a portion of their salaries in food provisions. National resources paid the rest of the salaries. The state also provided the costs of new teacher seminars to provide teachers for the new schools, as well as elementary school inspectors. In addition, the Senate subsidized the schools of poor municipalities and offered loans for others by request.

The rapidly increasing population meant, however, that while the number of children attending elementary education doubled from 1880–1890, a growing share of children was still excluded from education. The Senate issued several proposals to remedy the situation, but by 1905 only 40 percent of 9- to 15-year-olds attended elementary school, and many of them dropped out before finishing the intended six years. As attendance was low even where children lived close to schools, the pressure to adopt compulsory education grew with time. In 1906, to placate supporters of the elementary school, the Senate Economic Committee proposed establishing a committee to prepare a law on compulsory education with exemptions for rural areas. The exemptions were not favored by all, but the School Board held that in rural areas, only students living within a three kilometers radius from the school could be required to attend the full elementary school program.

The Committee was unanimous regarding the need for compulsory education, using arguments difficult to differentiate from those used in Finland today about extending compulsory education to upper secondary school. In addition to mentioning that compulsory education was already a reality in many European countries, the Committee noted that "today's cultural life requires formal education available for all children and has created needs and tasks which require general school attendance based on common education or 'bildung' [*kansalaissivistys*]." The Committee further deliberated that "the development of social and national circumstances toward democracy as well as the growing dependency of economic life on knowledge capital require compulsory education." The Committee also clearly disengaged itself from earlier religious goals of education by emphasizing the need for all active citizens to acquire a wide knowledge of the society and its structure, as without it, democratic society is not possible. Likewise, economic life emerged as a key reason for raising everyone's education level: "Nations where citizens have the longest education are the most productive and rich." Further to this point, the Committee also emphasized the importance of the comprehensive nature of education, and the need for it to be the same for all students and citizens.

The length of compulsory education was proposed to be six years in the countryside and seven in towns with one additional year of more practically oriented education for students who did not continue in grammar school. The schools were to be divided into lower and upper elementary schools (2+4 years) with different teachers.

While the Committee's proposal met some resistance in Finland, the "killing blow" came from the Russian administration (the so called "second phase of russification" from 1908–1917). While the Finnish Parliament

approved the law on compulsory education with a clear majority in 1910, the emperor did not approve it, with the effect that there was no law and no compulsory education for the next 10 years.

Grammar Schools

By the 1840s, the number of gymnasiums had risen to five and the number of upper elementary schools (formerly trivial schools) to ten. The upper elementary schools and gymnasiums had two tracks, one for clergy and one for civil servants and the merchant class. In 1843 there began a search for a new form of Finnish education and Finnish language was introduced as a subject in schools.

During the 1850s, formal education for grammar schoolteachers began, and the first Nordic professorship for pedagogy was established in the Imperial Alexander University (later University of Helsinki). In the grammar school reform of 1856, the syllabus was modernized with the addition of humanities and natural sciences and new languages while the weight of classical languages diminished. Simultaneously, the sequence of the different education levels was made clearer with one level preparing students for the next one, ultimately leading to the university.

In 1864, a new Swedish-language model school (*normaalikoulu*) was established in Helsinki, following new pedagogical principles brought from Germany by Finnish educationalists who regularly visited the country, and serving the on-site training of subject-teacher education. Teachers trained at this school got their education partially by studying abroad, mostly in Germany. They had to pass a degree in education, practice in the school (*auskultointi*) and give a proof of their ability.

Altogether, the period of Alexander II's reign between 1856 and 1873 was especially favorable for the development of post-elementary education with the old forms of secondary education abolished for a new grammar school (*lyseo*) in 1871, combining the old trivial school and the old three-year grammar school. Likewise, a National Teacher Forum was established to convene every four years, meaning that teachers gained a platform in matters regarding education, allowing an insider's view for further reforms and development.

In 1869, education of grammar school teachers moved to new education faculties at universities. This also marked a shift for teachers who had acquired subject proficiency in subject faculties. At the same time, the education system was separated from the church, meaning that the supervision of schools was moved from the highest religious authorities to a newly founded (1870) National Board of Education (*Kouluylihallitus*).

Beginning in 1891, the first five years of instruction at "real" grammar schools (*reaalikoulu*), i.e., those not oriented around learning in Latin, were redesigned to better prepare students for the steady march of industrialization. During the 1890s, Latin lost its status as a mandatory subject, and there were efforts to replace it with Russian.

In 1905, the earliest levels of education were reformed, with the two latter years of the four years of preparatory education forming the basis for grammar school. Additionally, private preparatory schools were established soley to prepare students for the grammar school entry exam. The School Edict (*koulujärjestys*) provided the lesson hour distribution and the syllabi for the different subjects. Following the German *lehrplan* (vs. the Anglo-Saxon curriculum), the syllabi of the different subjects followed pre-set educational standards, a procedure used in grammar schools until the establishment of the basic school in the 1970s, and visible in the way the matriculation examination is tied to the curricular goals and contents even today.

The 1914 School Edict gave the grammar school its final form, with five years of middle school (age-wise equivalent to current grades 5–9) and three years of upper secondary school. In most grammar schools, the last three years had two tracks, classical vs. "real." This School Edict meant the end of the tradition of the old classical grammar school with the "real" school becoming the new norm.

Key Perspectives on the Development of the Finnish Education System

Johan Vilhelm Snellman and Uno Cygnaeus were two key historical figures in the development of the education system. Snellman advocated for nation building through education, and in particular the adoption of the Finnish language throughout the system. Cygnaeus is responsible for creating the common elementary school.

Johan Vilhelm Snellman (1806–1881) was a Finnish philosopher, journalist and the key figure in the Finnish nation building of the mid-1800s. Snellman wrote a philosophical treatise in the 1840s about the moral imperative to dedicate one's life to building the nation. In his book on the state (*Läran om staten, 1842*) Snellman emphasizes education or erudition as the most important building block and explanative factor for a strong nation, including its economic development.

Snellman criticized Finnish society for the social and economic gap between the Swedish-speaking upper class and the Finnish-speaking common people. He saw the gap to be strongly related to language. When Snellman returned to Finland after travelling in Europe and living in Stockholm, he moved to Kuopio to become the principal of a (Swedish-speaking) secondary school and founded a new Finnish-language polemic paper, *Saima*, in 1844. Shortly thereafter he published another paper, *Maamiehen ystävä,* or "Farmer's Friend," in which he wrote on practical matters but also about the origin of the Finnish people and their identity. In *Saima*, Snellman wrote articles on childrearing, women, education, and the university. His writings attracted the attention of the Russian governor general, who warned Snellman to direct his radical ideas to the reform of government rather than encourage protest against government. *Saima* was ordered to close after two years of publication, but Snellman continued writing. After continued repercussions, Snellman turned his attention to economics. It was only after a period of increased political censorship in Finland, the Crimean War of 1853–56, the death of Nicolai II, and the

inauguration of Alexander II, that Snellman returned to the center of academic and social life. In 1856 he was invited to the University of Helsinki as a professor of philosophy (a chair that also included psychology and later pedagogy).

During this time, Snellman wrote extensively on different aspects of politics and social issues—on agriculture and banking, on the status of women, and on childrearing, education, and the university, with the latter becoming permanent features in the new Review he edited. Politically, Snellman became the leader of the *Fennoman* realpolitik faction. He believed that only under the safety provided by the Tsar (as opposed to the Russian aristocracy) could Finland secure its special status as an Autonomous Grand Duchy. He saw the education and wider social participation of the people as critical to this goal and saw that it could only be achieved by the promotion of the Finnish language. Snellman became a major political figure, advocating for the adoption of Finnish as the national language and the creation of a national currency.

Uno Cygnaeus (1810–1888),[1] "the father of the Finnish elementary school," echoed Snellman in his views on the role of education in building the nation. Cygnaeus was well read in educational literature and had travelled extensively in Europe, looking for models for Finnish education. The Germans Fröbel, Pestalozzi and Diesterweg introduced him to education theory, with Pestalozzi's ideas of universal education as a tool for teaching the nation and its individuals to help themselves both mentally/spiritually and materially proving especially influential.

One of the tasks Tsar Alexander II gave the Finnish Senate was to draw a proposal for the development of rural schools. The School Committee recommended in 1851 the establishing of religious institutions centered on preparing students for the Lutheran confirmation. Cygnaeus gave the Senate his dissenting view, emphasizing that in addition to religion, the syllabus should include both general (literacy) subjects and subjects developing practical competences. Cygnaeus saw that such a school would be the strongest tool for advancing the spiritual and economic development of the nation.

Cygnaeus' writing comprised a full-fledged education policy program. It included an independent educational administration, teacher seminars with practice schools, proposals for physical education and the importance of practical subjects in the syllabus. The proposal stressed especially the importance of the education of female teachers and girls from lower social classes as "the predisposition of the future generation's suitability for its tasks

[1] Like so many of the social elite of the 1880s, Cygnaeus was Finnish by spirit but Swedish by mother tongue, even if he stressed that four generations earlier his family had been Finnish speaking.

depends primarily on women" (Kansallisarkisto n.d.). Cygnaeus also stressed that girls should be taught childcare and the care of children's mental wellbeing as well as general health education, a subject reinstated in the lower and upper secondary curricula in 2001 and into the matriculation examination in 2007.

Cygnaeus was not alone in promoting these ideas, however, and in 1852 the first Nordic professorship in pedagogics was established at the University of Helsinki. Likewise, the advancement of girls' education had been a priority of upper-class women's societies since the 1830s, and the Fennoman movement had put the education of the Finnish-speaking common people front and center on its agenda. Supported by these trends and by economic arguments about the value of an educated work force, Cygnaeus' views on the development of elementary education "won" the competition against the narrower religious model.

While traveling around Finland, Cygnaeus concluded that little attention was paid to children's mental and physical development. During visits to German-speaking Europe, he was inspired by Fröbel's concept for kindergarten and other innovative ideas on early education. This may be the source for the strong emphasis on play in Finnish early education.

In the 1860s, Cygnaeus proposed that elementary education be under national jurisdiction and administration and provide a basic education to children of both sexes from all levels of the social echelon. He proposed that the syllabus include sports and crafts and aim to foster work skills and entrepreneurship. His ideas were found too radical, however, especially making provision of education compulsory and requiring the education of girls. Many rural municipalities did not want to assume the economic burden of establishing a school, and, as the decree that was eventually issued did not make elementary education compulsory, they had no obligation to do so. As a result, Cygnaeus' goal of social equality advanced only slowly. Elementary schools did not start to become common across the country until after a regional legislative decree in 1898. In the end, Finland was one of the last European countries to establish compulsory education (Law 101/1921).

For Cygnaeus, at the heart of common elementary education was the building of the rising nation. In this, he was in strong opposition to many who saw that elementary education should offer the children of lower social classes just enough knowledge and skills to be able to serve the upper classes. He emphasized how only a comprehensive school, serving the children of all social classes, would bring true social advantage and equalize the social structure of the nation. Almost a hundred years before the reforms of the 1970s, Cygnaeus saw in comprehensive education the foundation of a strong, safe, and stable society.

2

Education Under Independence

Among the first major reforms after independence from Russia in 1917 and the civil war that followed was the agrarian reforms which gave land to tenant farmers (torpparivapaus), and rural workers who previously had no land of their own. Independence also started a new phase in the development of education, seen as crucial in unifying the country after the civil war. The first concrete step was the law on compulsory education in 1921, even if its full implementation across the country did not happen until the early 1930s. The period before WWII consolidated the system of elementary school for all but grammar schools only for those selected based on ability, with a comprehensive basic school and non-compulsory upper secondary education only emerging in the 1970s.

Early Childhood Education

As in many other Western countries, the roots of Finnish early childhood education (ECEC) lie in a (Christian) concern for urban working-class children, which led to the idea of day care centers—or kindergartens as they were then called. Conceived by the German educator Fröbel, kindergartens were first introduced to Finland by "father" of Finnish elementary education Uno Cygnaeus in the late 1850s. Finland's first common kindergarten, and the first among the Nordic countries, was established in Helsinki in 1888 and drew on the ideas of Pestalozzi and Schrader-Breymann as well as Fröbel (Meretniemi et al. 2017).

In 1892, pre-service education (as distinct from on-the-job training) was established for kindergarten teachers, first as a one-year program in Swedish, then extended to a two-year program in 1896. From 1897 on, this education was financed and overseen by the National Education Board. In 1905, Finnish-language teacher education began. After this, the student intake changed yearly between Finnish- and Swedish-speaking applicants until 1958, when the Swedish language program was transferred to Pietarsaari (Jakobstad) on the west coast. The early education teacher program was reconceived as a seminar in 1908, when a new building (Ebeneser) in Helsinki was erected for the kindergarten and the seminar. Maybe reflecting the upper-class origins of the founders, the student teachers in the early education seminar were required to have passed the mid-level girls' school, whereas seminars for elementary school teachers only required elementary education. The foundation for the still-current emphasis on music in Finnish basic education (see Chapters 4 and 11) is already visible here, as

one of the requirements for student teachers was singing while playing an instrument (usually piano). A sense of "deep vocation" and a Christian worldview were also expected. Kindergarten teacher education was open only to women.

Before the turn of the century, there were already several kindergartens operating in cities or towns outside Helsinki, and by 1920 their number had increased to about 80. In 1927, the state identified certain requirements of the kindergarten in order to receive state support: kindergartens must serve children between the ages of three and seven; serve a group of more than 25 children (apparently as a testament to service for a wider community); provide care lasting for more than four hours; and hire qualified early education teachers.

Early education was first established under the Board of Education and subsequently (against the advice of the Minister of Education) transferred to the Ministry of Social Affairs and Health, as at the time (1924) it was primarily seen as a social service facilitating women's work outside of the home. Not until the early 1950s, when some MPs (Members of Parliament) began to lobby for a third early-education teacher seminar in Tampere (a second had been founded as a sister institution to the Helsinki Ebeneser in 1947), was early education again broadly conceived as the beginning of the child's educational path. Yet, the legacy of childcare as a social service for families under the Ministry of Social Affairs and Health lasted another fifty years, and was not transferred to the Ministry of Education and Culture until 2013.

Elementary Education

When it achieved independence in 1917, Finland was one of the last European countries without compulsory education; as noted above, this was due to the Russian emperor's rejection of the parliamentary proposal of 1910. Although only 63 percent of school-age children attended elementary school in 1917, the total picture was not quite so bleak, as an additional 200,000 children (from a population of 3.1 million) attended schools for studying the Catechism led by itinerant clergy. Indeed, this education in the Catechism indirectly helped bring about the passage of the law on compulsory education, as many opposed its religious overtones and sought a more secular approach. Similarly, the civil war, which involved the peoples' rise against the authorities, was perceived in some circles as proof of the "low intellectual level of the people" (Lindström 2001, 79), leading to calls for universal education. The biggest obstacles to approving compulsory school legislation were the economic depression and food shortages following the civil war. The issue was on the agenda of all parties, but the political right thought the economic situation made immediate implementation unrealistic. There were also disagreements about the division of finances between the state and the municipalities, and controversies regarding the role of itinerant schools, given the law on religious freedom.

Compulsory education was primarily an issue about the educational rights and equality of the rural population. Elementary education in the rural regions was seen as a first step to usher in equal opportunity for all children, which would be followed by access to higher levels of education. In the new compulsory school proposal of 1919, an extra year of schooling intended only for city schools in the original proposal was extended to two years and encompassed the whole country. Religion remained on the list of subjects, lest the church use the question of religion as a tool to oppose the whole reform. The law proceeded slowly, however, and in spring 1920 Finland was the only country in Europe without compulsory education outside of Belgium. Even at the last minute in 1920, a group of Coalition (Conservative) Party MPs determined to oppose the law as too expensive, but finally a clear majority supported both the law on compulsory education and the model for its financing. The final approval fell to the next government in April 1921. However, poor municipalities were given a right to delay the implementation of the law up to 21 years, and many did so. Yet, expanding compulsory education and the elementary school are also seen to have built a sense of nationalism across social classes which contributed to Finland's "miraculous" defeat of the Soviets when they invaded in 1939. It is interesting to note that basic education is also seen as the reason for another Finnish "miracle," its success in PISA in the 2000s.

After the full implementation of the law on compulsory education, the number of students in elementary schools grew rapidly and began soon to increase demand for more grammar schools. In 1920, only 3.9 percent of 7- to 15-year-olds attended grammar school. First, their share grew slowly, but during the 1960s, when the baby boomers entered grammar school age, the population pressure forced a full reform of the education system.

Grammar Schools

In 1918, grammar schools in the newly independent Finland replaced the classroom time spent on Russian language with lessons on mother tongue (Finnish/Swedish), religion and history. A new 12-year comprehensive school was also introduced in 1928, comprising six years of elementary school, three years of middle school and three years of grammar school or gymnasium in a single institution. During the 1930s, Finland made efforts to expand this new model of school to become the standard, with little success. The reigning model was to study in a common elementary school for four years and then take an entrance examination to a grammar school, which consisted of a five-year middle school and a three-year gymnasium.

In 1930, there were more than 200 grammar schools in Finland. The number rose to 300 by 1950, and to over 600 in 1970. A 1939 law codified the already common structure of five years of middle school and three years of gymnasium. Most grammar schools were private (*yhteiskoulu*) charging a fee but offering free tuition for high-achieving students from low socioeconomic status (SES) families. This was also the case for state schools (*lyseo/yhteislyseo*), but their tuitions were much lower than those in the private schools. There were also a few state University schools (*normaalilyseo*) which were responsible for subject teachers' pedagogical education and

supported pedagogical experimentation and research. In 1941, learning standards and pedagogical guidelines (*oppiennätykset / metodiset ohjeet*) for the state schools were published. The rapid rise in the number of private grammar schools was made possible by the state subsidizing operating costs in addition to tuition, which covered only some of the expenses.

After WWII, there were no major changes to the grammar school except that many schools developed three tracks: language/classical, mathematics, and science. In 1946, however, a new type of municipal middle school was introduced to expand educational opportunities outside the bigger cities. These schools had a syllabus covering the first five years of grammar school. Yet, these middle schools were slow to grow, and only 70 were established before comprehensive schools were adopted in the 1970s.

Before 1920, less than 10 percent of eligible children attended grammar schools. They remained mainly an option for the children of well-to-do families in the bigger cities through the 1930s and 1940s. By 1950, however, this had begun to change quickly, with about 25 percent of the eligible age group attending middle school; by 1960, the figure was closer to 40 percent.

Children entered grammar school by taking an exam. Until 1954 the exam covered religion, mother tongue, mathematics, and geography; after that, it was pared down to just mother tongue and mathematics. Applicants also submitted their grade 4 report card and a statement from their grade 4 teacher. In bigger cities, grammar schools quickly became "ranked" according to student performance on the entrance exam, as each school admitted their applicants with the top scores. In this, Finland differed from most European countries where teachers and parents have a much bigger role in deciding student paths within their tracked systems. The same admissions process is used for upper secondary education, with the difference that teacher-assigned grades have replaced the universal entrance examination—a practice possibly compromising students' rights to fair treatment (e.g., Ouakrim-Soivio et al. 2017, Chapter 10.3). The competitiveness of grammar school education is reflected in high standards for passing from one grade to the next; unlike in the basic school of the 1970s, grade retention was relatively common. In retrospect, the retention of (especially) boys during the last years before the matriculation examination at the end of upper secondary school helped equalize boys' and girls' achievement, something that is an issue today.

Until the basic school reform in the early 1970s, almost half of Finnish students did not enter grammar school after the four years of elementary education, which the whole age cohort attended together in the local school. For those students not going on to grammar school, elementary school continued for two or three more years, after which the majority of students transferred to vocational or professional institutions (trade schools) which prepared them for work with a two- to three-year training course. Slowly, however, a growing number of students transferred to vocational training after completing middle school. After that, the students either entered

the job market or continued in mid-level vocational institutes, which even allowed application to university through an entrance examination.

Finland's adoption of the comprehensive school in the period 1972-1977 ended its more than 100-year-old tradition of grammar schools. Instead, the middle school (grades 1–5) combined with the first four years of elementary school to form the new basic school while the gymnasiums continued as independent entities. State schools and some of the university and private grammar schools adapted differently, transforming into a full twelve-year school including comprehensive (grades 1–9) and academic upper secondary (grades 10-12) grades, or else combining just the lower secondary (7–9) and academic upper secondary (grades 10-12) into a single secondary school. The latter was the solution chosen by many formerly private schools, which were then annexed into the municipal education system as (quasi) independent schools which received public funding, followed the national curricula, and adhered to a neighborhood student allocation while maintaining an independent administrative body.

3

The Basic School Reform of the 1970s

It became clear soon after the Second World War — which devastated Finland economically — that Finland would need to increase the education level of its population to create a qualified workforce to rebuild the nation's economy in an age of rapid industrialization. The nation's first step was to establish new middle schools across the country, although accommodating the full post-war baby-boomer cohort proved a challenge. In addition, the Nordic welfare model put in place after WWII was guided by ideals of equality and social mobility that did not align with Finland's highly tracked education system. A vision of a new comprehensive school began to gain ground in the late 1950s, leading to the comprehensive school reform of the 1970s.

Preparing Ground for the Reform

Already in the mid-19th century, Uno Cygnaeus envisioned comprehensive education as a means to elevate the Finnish people. After independence, a comprehensive school reform returned repeatedly to the agenda in both the press and Parliament, and especially after the law on six-year compulsory education (*oppivelvollisuuslaki*) was at last approved in 1921 and written into the Constitution, several parliamentary committees were established to look at the issue. Until this, the different levels of education had been discussed and decided on without a comprehensive plan. Parliament made no decisions on the issue, however.

The 1921 law on compulsory education was replaced in 1957 by a law on elementary or primary education (*kansakoululaki*), in which the elementary school was defined to comprise a four-year program for all, followed by a two-year civic school (*kansalaiskoulu*) program for the students who did not transfer to grammar school. Advised by University of Helsinki Professor of Education Matti Koskenniemi, author of a seminal treatise on primary school didactics, the Primary School Curriculum Committee of 1945 had changed the focus of Finnish primary education from the earlier German-inspired, syllabus-centered *lehrplan* to the Anglo-American objective- and process-oriented curriculum. Yet, the general goal of education was still based on the idea of *bildung* with its connotation of growth toward the fulfilment of one's human potential. Pasi Sahlberg pointed out in his treatise of 2011 (p. 17) how the curriculum of Koskenniemi's Committee laid the foundation for the cross-curricular ideas that shaped the work of the Comprehensive School Curriculum Committee of 1970. The Committee's ideas,

published in 1952, were implemented later in 300 schools across Finland. In his book of 2011 (p. 17), Pasi Sahlberg sees the implementation of the Koskenniemi Committee's ideas as the first true link between research and education policy in Finland—not to mention the inauguration of true child-centered education. He also notes the emphasis on social cohesion in the report, a feature reminiscent of the educational discussions and law-making more than fifty years earlier (see Chapter 1 above).

Following an earlier Committee proposal from 1948, a Committee for the Education System, which sat simultaneously with the Curriculum Committee, created a plan for an eight-year compulsory school which would be common to all, abolishing the tracking for "academic" and "vocational" studies common to the existing system. Grammar school teachers and the academic community as a whole strongly criticized the plan, and the proposal was soon dismissed. Sahlberg (2011a), however, sees the committee's work as a new start for common discussion on social justice and equal educational opportunity.

Following the advancement of the baby boom generation on their educational paths, the 1957 law finally extended compulsory education to 6+2 (primary + civic) to those who did not enter middle/grammar school (4+5). Yet, despite this addition, it soon became clear that the education system was unable to adequately respond to the growing need for a qualified labor force generated by the rapidly growing economy. For a long time, however, there was no consensus on how to solve this problem. Barriers grew between the political right led by the Conservative Coalition Party and the political left of the Social Democratic and Socialist Parties as well as between elementary and grammar school teachers.

In 1956, a new committee was once again set to "prepare an education policy program taking into consideration the reforms already under way." Headed by the Director of the Education Board R. H. Oittinen, the committee report declared that "according to the democratic principles of the society, everyone should have the same possibilities to fulfill their educational and cultural needs according to their potential and interest." This was understood to mean that basic education should last nine years for all students, regardless of background or aptitude, meaning that existing elementary and middle schools should be combined. This new basic school was seen to offer the additional social advantage of all students staying longer in the protective sphere of the school and having more time to mature before entering the working world. It is interesting to note the similarities with today's discussion about the extension of compulsory education to cover the upper secondary level.

However, the committee did not propose a comprehensive school that would be the same for all. The new municipal nine-year school would include a four-year elementary school for all, followed by a streamed two-year middle stage and a fully tracked three-year lower secondary level. The lower secondary tracks consisted of a practical-orientation track, a one-foreign-language track, and a two-foreign-languages track. The practical track followed from the then elementary + civic + professional training syllabus, the less demanding academic track

followed the syllabus of the municipal middle schools preceded by four years of elementary education, and the more demanding academic track followed the syllabus of the first five years of the private or state grammar schools. Despite the plan for this comprehensive reform, the committee also recommended the founding of new private and municipal middle schools. The committee was not unanimous, however, and although the proposal was approved in June 1959, it did not lead to immediate action.

Committee Work Toward the Reform

Parliamentary discussion on the reform only began after the addition of some private members' bills to the agenda of the Education and Culture Committee in February 1963. At the same time, eight members of Parliament introduced a joint motion asking the government of Prime Minister Ahti Karjalainen (Agrarian Party) to proceed with the education reform along the lines laid out by the School Committee of 1956–1959 and approved by a wide majority of Parliament. They asked the government to propose without delay a law to reform basic education. The parliamentary Education and Culture Committee acted on the motion immediately, and in November 1963 asked the government to investigate how a transition from tracked schools to comprehensive schools could be achieved.

During the subsequent parliamentary discussion, opponents immediately raised the same objections presented to the 1959 committee proposal. The Minister of Education Armi Hosia (Coalition Party) began with the reminder that there was no consensus on the reform and proposed maintaining the tracked system through a series of smaller reforms (e.g., foreign language teaching in the elementary and civic schools). She also called for results from the ongoing comprehensive school experiments and for more information on the status of private schools in case the reform was approved. The head of the Education and Culture Committee Anna-Liisa Tiekso (the Socialist League), by contrast, presented clear criticism of the government for not having proceeded along the lines of the 1959 committee report.

Ultimately, all parties supported some sort of school reform, but diverged on content and implementation. The two parties on the political left most firmly supported the proposal based on social and regional equality. Slowly, the Agrarian party also joined the cause for regional equality. The Coalition party stood for limited reforms, which would save the tracked system. The Swedish Party and the (now defunct) Finnish National Party were internally divided with supporters for both views. Parliament voted on the motion of the Education and Culture Committee in November 1963 with 123 for and 68 against. Accordingly, Parliament expressed an open intent for a thorough reform of the education system, meaning support for the comprehensive school.

Following the customary procedures, the government nominated in February 1964 a Basic School Committee to prepare a proposal for the structure of comprehensive education according to the guidelines of the previous

Committee and the auxiliary motions accepted in Parliament. Additionally, the Committee was to lay out a road map for the transfer to the new system and of the necessary legislation. The Committee handed in its proposal in September 1965 (Library of Parliament, 1965). The proposal followed the earlier recommendations for a compulsory nine-year comprehensive school that would unite the earlier elementary, civic, and middle schools within a 6+3 structure. In the proposal, comprehensive meant that "teaching of all children is generally uniform and covers the same content but includes gradual differentiation vis-à-vis subjects and course choices." The "generally the same" mainly referred to grades 1–6 while more individualized paths would be offered in grades 7–9. Streaming in the upper grades would mean different standards (*oppimäärä*) in some subjects. The basic school (*peruskoulu*) was to be free of charge and provide the same social services and benefits to all children.

Preparations continued in a School Reform Task Force (Library of Parliament, 1966), which focused on the content of the new school. As stated in earlier documents, the school was to "guarantee [for all] an education that would fulfill their dispositions and abilities." The Task Force made a proposal for the distribution of lesson hours for both common and elective subjects or courses (an antecedent of the lesson hour plan in law today). Differentiation in grades 7–9 meant different levels of syllabi in mathematics and foreign languages. It also emphasized providing extra support to those students who needed it in order to advance. The Task Force proposed experimentation with the new structure and syllabi, so starting in 1967 several schools across the country piloted the new comprehensive model following the provisional curriculum.

The Final Steps and a New Law

Parliament considered a new education law in spring 1967. This was the first time since the motion of 1963 that Parliament had met to discuss reforming the education system. Prime Minister Rafael Paasio's bill was largely aligned with the motion of the Basic School Committee and the School Reform Working Group. In his opening statement, Minister of Education R. H. Oittinen emphasized the rapid expansion of education during the 1950s with the founding of new elementary and municipal middle schools. Even then, the educational discussion centered on social equality and the universal need for the greater educational depth and breadth provided by middle school. He emphasized especially the need for more education than was provided by the elementary school in languages, mathematics, physics, and chemistry, but also the pedagogical and economic value of education.

After some preliminary discussion, Parliament forwarded the motion to the Education and Culture Committee, who also heard auxiliary motions by individual PMs or groups of PMs. The Committee made several changes to the proposal, including the allowance for private schools to continue as "substitute" schools in the municipal systems. The final law allowed each municipality to choose whether the first mandatory "foreign" language to begin at grade 3 would be English or the other national language (i.e., Swedish or Finnish, depending on the

school's language of instruction). This led to almost all Finnish-language municipalities choosing English and almost all Swedish-language municipalities choosing Finnish, with an option for another language beginning at grade 5.

Other topics discussed included, among other things, the goal to begin implementation where current educational services were most lacking; the allocation of expenses between the state and the municipalities; the balance between theoretical and practical subjects; teachers' positions; and school administration. The framework law was subjected to both the Grand Committee and the Constitutional Law Committee,[2] and it was discussed in six separate sessions of Parliament. A proposal for the law was finally given to the (then) left-dominated Parliament where the three biggest parties (Social Democrats, Center, Socialist League *SKDL*) guaranteed political support for the comprehensive school. Even on the political right, doubts mainly concerned economic resources for the implementation of the reform.

The law on basic education was finally approved in Parliament on May 24, 1968, and together with the ensuing decree came into effect on January 8, 1970. The implementation of the basic school began in the Province of Lapland in autumn 1972 and reached the three municipalities of the Helsinki region in autumn 1977.

Changes in the Basic School from the 1970s to 2020

The basic school has gone through several reforms during the nearly fifty years since its inception, but none has changed the foundational feature of access to the same curriculum for all students. It might come as a surprise to those opposing the introduction of standardized testing into Finnish basic education today to learn that two successive parliamentary committees on student assessment were prepared to add standardized tests to the new system. The goal was to help monitor the development of learning outcomes with standardized tests or exams in key subjects with a special emphasis on providing a tool for comparable assessment in schools. The Finnish Institute for Educational Research was tasked with developing the tests, as it had developed and administered personality and school achievement tests prior to the education reform of the 1970s. This work was closely related to Finland's 1970–71 participation in the first-ever international study of reading comprehension by the International Association for the Evaluation of Educational Achievement (IEA). The Institute began to develop and market standardized tests in some key subjects but their use was voluntary and never became widespread. Possible explanations include the unwillingness of schools to pay for the tests; a change in pedagogical thinking

[2] The Finnish parliament has 16 special committees and the Grant Committee. The special committees prepare government bills, legislative initiatives, government reports and other matters for the handling of the plenary sessions. The Constitutional Law Committee can be seen as a substitute for the Constitutional Courts of other countries.

emphasizing formative assessment; and the decision to "standardize" grading based on a fixed distribution of the grade scale (from 4 = fail to 10 = excellent). The legacy of normative group or school-level standardization has persisted, as national sample-based assessments administered since the 1990s have shown. The issue was compounded by the elimination of the school inspectorate in 1991, which had provided some level of monitoring until that point. This raises real questions about the comparability of student grades used for admission to upper secondary school.

Policy reforms did not end with the adoption of the basic school in the 1970s. In the mid-1980s, the School Inspectorate and state approval of textbooks ended and streaming at the lower secondary grades was abolished, a practice that had been approved partially as a compromise to achieve the reform of the late 1960s. Streaming in Physics and Chemistry had already been eliminated during implementation of the comprehensive school across the country, apparently for financial reasons. But in 1977 (the year the reform at last reached the Helsinki region), a research project was launched to study the impact of streaming in the two remaining subjects, English and Mathematics. The research revealed that the courses with the lowest standards, which did not allow students to advance to the academic track of upper secondary education (see Chapter 4), were mainly chosen by boys and students from lower SES families. As a result, streaming was eliminated in these subjects as well in 1985. Yet, as later research has shown, informal streaming has still been a practice in many schools, especially in mathematics. Yet there is a key difference between formal and informal streaming: even the slowest-paced course syllabus follows the goals and standards of the NCC and does not create dead ends for students who might later regret earlier educational choices.

The abolition of school inspection in 1985 was part of a wider educational decentralization that began in the 1980s and was formalized in the new law on basic education in 1983. It is interesting to note that despite dismantling the strong central governance of the Finnish education system, the 1983 law is generally regarded as the government's most explicit guarantee of universal access to a comprehensive education.

The next major education law to pass, in 1990, introduced parental choice among schools into Finnish basic education (Varjo, Kalalahti & Silvennoinen 2014). The choice was generally among schools with different language programs. The 1990 law also included an optional one-year extension of the nine-year comprehensive school for students who needed to raise their grades before entering upper secondary education. Further, the law introduced study and career counselling to the curriculum as a new subject to help students in career planning, while also reinforcing the status of upper secondary education as a natural if not compulsory continuation to basic education. A new National Framework Curriculum was accepted in 1985, replacing the very detailed first Curriculum of Basic Education, approved in 1971 when the basic school was established. Reflecting the decentralization promoted in the new law, the new Framework Curriculum gave municipalities wider freedom

regarding both the syllabus and assessment. Meanwhile, Finland's participation in a new round of the IEA reading study in 1990–1992 offered the only tool for monitoring national learning outcomes. Of the 30 participating countries, Finnish 9- and 14-year-olds were among the highest performers, achieving even better results than on the first IEA in the early 1970s, before the adoption of the comprehensive school (Linnakylä 1995). Moreover, the Finnish results were characterized by the equity of performance that Finland later became known for on the early PISA studies (Lehto et al. 2001).

The decentralization of Finland's education system and the 1993 law allowing parents free school choice opened the door for the weakening of the hitherto strong neighborhood-school principle, which had been one of the backbones of the basic school. However, as the law did not dismantle the principle of school districts, which obliged schools to cater to all the children in their respective districts, the parental choice option mainly applied to families in bigger cities where changes in resident density had left many city schools with a waning student population. The decentralization of education continued with the next curricular reform of 1994. The National Core Curriculum (NCC) 1994 introduced the current two-level structure of the national and local curricula. Together with the freedoms allowed for the local curricula based on the NCC 1994, this led to schools seeking to distinguish themselves with optional courses and emphases, including optional foreign languages. Despite later changes in the NCC, the interest- or aptitude-based classes many municipalities offer today (see Chapter 11) can be seen as direct legacy of these earlier decisions. Choice among these classes is seen as a form of Finnish school choice and may be a factor behind the differences in learning outcomes between classes *within* schools (Berisha & Seppänen 2016; Hansen et al. 2014; Kupiainen & Hotulainen 2019; Seppänen 2003).

Despite the small regional differences revealed in the IEA reading study of 1990–1992, the introduction of local curricula following the NCC 1994, which has often been given as a reason for Finnish students' success in PISA, was also soon understood to introduce educational inequality. Without centralized control over curriculum, municipalities with greater financial and administrative resources could offer more course options to their students. Possibly driven by a growing international interest in the role of education in global development, Finland became more focused on monitoring learning outcomes during this time. Closely tied to these international developments, which were soon realized in the OECD PISA, the European Commission's key competences, and the 21st Century Skills of the respective P21 Partnership (Fadel 2008), the Finnish National Board of Education (FNBE) developed its first Assessment Strategy (FNBE 1995/1998, 1999), administering the first assessment of basic school students' learning outcomes based on a nationally representative sample in 1998. Soon after, the first assessments of learning outcomes were implemented by the FNBE in 1998 in mathematics and sciences, with assessments in Finnish/Swedish and English (advanced or A-level) following in 1999 (for a meta-analysis of the first assessments, see Jakku-Sihvonen & Komulainen 2004). Yet, as there were no earlier data on students' competence, the results could only draw a picture of students' proficiency in relation to the

tasks designed to reflect the grade 9 curriculum, calibrated for optimal psychometric properties. The same is true for most of the later assessments where anchor items have been scarce, meaning that the monitoring can mainly address differences between groups of students regarding region, language of instruction, gender, and students' social background rather than trends in performance.

In the 1990s, new attention was also directed to upper secondary education where pilot projects were implemented at 97 schools with the goal of finding commonalities and collaboration between the two tracks of general and vocational education. The project ended in 2001, drawing guidelines to the current model, which offers in addition to the two basic tracks of general and vocational education what are called double and triple qualifications. In the first, vocational education is enriched with courses from the general upper secondary syllabus (normally taught in an adult upper secondary school) to allow participation in the matriculation examination, while the second refers to enriching the vocational education with a full general upper secondary education. The options are open only in some programs of vocational education and are annually chosen by about five percent of students.

In 1998, parliament approved a new law on basic education which emphasized the goals of education and students' rights and duties (OPH 2010). External control and supervision were further reduced, for example when the inspection system was replaced with a system of quality control based on school self-evaluation (Harjunen et al. 2017). Furthermore, the law brought evaluation into focus for the first time, and both thematic reviews and national assessment of learning outcomes were created to align with the 1995 Assessment Strategy.

Reflecting a concern about growing educational inequality in the wake of NCC 1994, the Finnish government redesigned the 2004 curriculum as a more centralized and openly normative document, emphasizing national decision-making and reducing opportunities for local implementation allowed by the NCC 1994. Jouni Välijärvi and colleagues look at this shift in the larger context of the first Finnish PISA success:

> *Paradoxically, shortly after the international publication of the first PISA results, the Finnish government made a decision to harmonise the education system by adding to the share of compulsory studies at comprehensive schools and by giving more weight to core subjects. The potential threat of growing differences between schools and the increasing number of Finnish students falling short in reading literacy and mathematics were the main arguments for the decision. Assessment results and political decision-making on education do not always go hand in hand. (Välijärvi et al. 2007, 51)*

The NCC 2004 also included the first versions of what came to be known on the NCC 2014 as the "transversal competences," and for the first time offered partial criteria for students' assessment. Yet, as in 1994, municipalities and schools were to write their own curricula based on the national document.

As we've seen, Finnish curricular reforms, undertaken about every 10 years, reflect changes in global and national pedagogical thinking (for further discussion, see Chapter 9). Since the 1970s, only one extensive reform took place between the regular cycles. That reform focused on the organization of special education, or support for learning. The reform amended the law on basic education in 2011 and added an addendum to the then-current NCC 2004 that same year (see Chapter 11). Another later addition to an in-force NCC was the revision of the part of NCC 2014 regarding assessment (see Chapter 10). In this ongoing reform, both the NCC chapter regarding assessment and the assessment criteria it provides for the different subjects will be re-written. The reform is especially noteworthy as it will mean for the first time the NCC will provide goals for student learning (in the original NCC 2014 goals are written just for teaching) and criteria for minimum proficiency in the different subjects. However, as the criteria are still just descriptive guidelines on which teachers can base their assessments and are hard to interpret, it might be premature to compare them to the exam-based standards of other countries. Yet, compared to the current criteria given just for a score of 8 in a scale from 4 = fail to 10 = excellent, the addition of new criteria for scores of 5, 7 and 9 can be expected to bring at least some more comparability to the grades across schools. And as we mentioned earlier, the reform will present for the first time national criteria for proficiency for students leaving compulsory education.

4

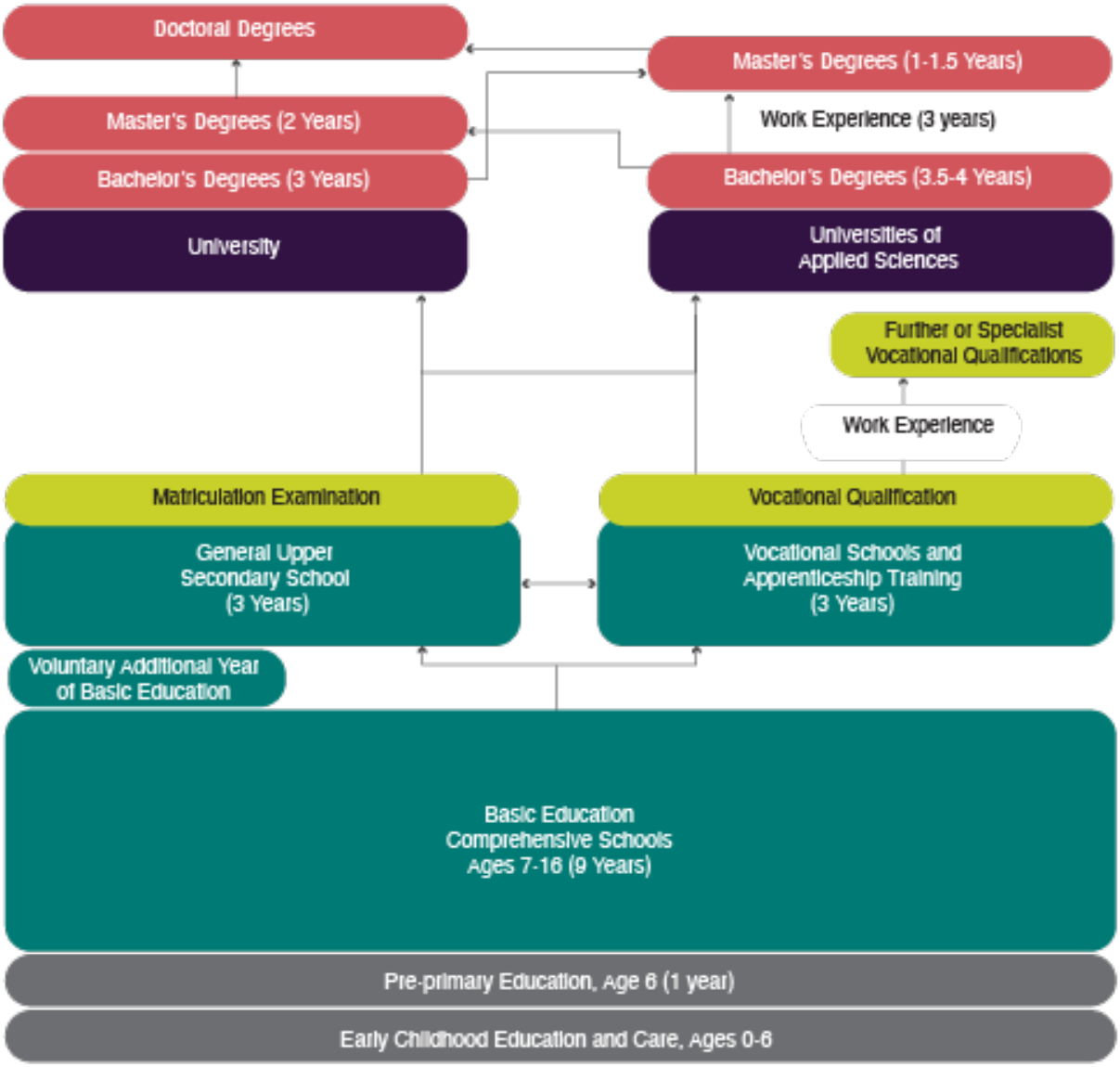
The Finnish Education System

Perhaps the most important feature of the Finnish education system is the principle of no dead ends. This principle was first introduced in 1985 when streaming was dismantled in lower secondary education and was extended to tertiary education in the 1990s, when the post-secondary educational institutions were reorganized into a network of universities of applied sciences. While the previous chapters have centered on the education of students of basic education age, in this chapter we will present the Finnish education system as a whole. Yet as the focus of this international comparative study is on students aged 15 and younger, our discussion of the higher levels of education will be concise, emphasizing features with immediate ties to basic education or to the options open to students after compulsory education.

The Finnish education system consists of early childhood education and care, pre-primary, basic and general upper secondary education, vocational education and training, and higher education (see Figure 1, next page).

Compulsory schooling consists of one-year pre-primary education for six-year-olds and nine-year basic education for children aged 7–16. Upper secondary education follows a dual model of general (academic) and vocational education and training, entered through an application process, where acceptance to any institution is mainly based on students' grades at the end of basic education. The general academic school leads to the matriculation examination, which is the only standardized high stakes test in the Finnish system, and the vocational school to profession-specific vocational qualifications. Tertiary education comprises research universities and universities of applied sciences. The research universities engage in both education and research and have the right to award doctorates. Universities of applied sciences are institutions of professional higher education engaging in applied research and development. We will present and discuss each educational level more closely in this chapter.

Figure 1. The Finnish Education System



Early Childhood Education and Care

All children under school age have a statutory right to early childhood education and care (ECEC) but parents may choose whether to participate. Parental leave ends around the child's first birthday, after which parents have several options to choose from: ECEC centers, family day care, or a parent may take "home care" leave from work and receive an allowance, available until the child turns three. This last option, often supported with extra

payment from the municipality, is currently under reconsideration due to an effort to increase female participation in the labor force. Finland has a smaller share of children under four participating in ECEC than many other Western countries given that staying home with children is subsidized. Unlike preschool and basic education, which are free, participation in ECEC is subject to a fee proportionate to family income and number of children. The fees in municipal ECEC are highly subsidized and cover only about 14 percent of total costs. The maximum fee charged for ECEC is EUR 289 (2021) per month while a growing number of children receive ECEC at no cost.

ECEC services are a municipal responsibility, and in 2018 over 80 percent of those enrolled in ECEC attended municipal day care centers (Stat Finland Trends 2021). There are a growing number of private providers publicly subsidized through vouchers or home care allowance. However, their fees are higher, and the subsidy does not take into consideration families' socio-financial circumstances like the municipal daycare centers do, so the private sector is seen to threaten social equality among children. The private daycare centers can also operate for-profit, which has raised political controversy. The biggest provider, established in Finland but sold later to Swedish investors, until recently ran 160 daycare centers across the country (40 have been forced to close due to financial shortcomings).

The evaluation of ECEC is a statutory task of the Finnish Education Evaluation Centre (FINEEC) (Act on Early Childhood Education and Care 540/2018, Section 24). The aim of evaluation is to promote the preconditions for children's wellbeing, development, and learning; to ensure the implementation of the law's intention; to gather data for developing early childhood education locally; and to serve as a basis for political decision-making. Based on the first national large-scale evaluation, the FINEEC published guidelines and recommendations for evaluating the quality of early childhood education and care (FINEEC 2019; Vlasov et al. 2019).

Unlike basic school, group sizes and adult/child ratios in ECEC are nationally regulated. The chief stipulation applies to adult-child ratios, with one adult per four children required for children aged three and under, with a maximum group size of 12 children, and one adult per eight children for children aged four and older. Some exceptions apply for children in need of special attention or care. Otherwise, the formation of groups is left to the municipalities and daycare centers and can be arranged according to age or sibling relationships, for example. In ECEC centers, the half-day pre-primary education for six-year-olds often takes place in separate groups with the children continuing in daycare if the parents so choose. If pre-primary education is organized on comprehensive school grounds, it can be provided in separate pre-primary groups or integrated into a group of students in compulsory education (mostly grades 1–2).

The ECEC personnel comprises early education teachers with a BA from a research university (for the history of early education teachers see Chapter 5) and care-oriented personnel with an upper secondary education in the

fields of social work and health. Among the personnel, the requirement is one early education teacher for two employees with a lower level of care-oriented education. Recent debates (some of which have grown heated) have centered on the possible replacement of ECEC teachers trained in the educational sciences with teachers trained in social work. Both kinds of teachers hold bachelor's degrees, but the latter's degree would be from a university of applied sciences. According to regulations, all children in need of support for learning and welfare should get support from an early education special education teacher.

As with all levels of education below tertiary, the key goals and content of ECEC are presented in a national curriculum from which foundation the municipalities build their own curricula (see Chapter 9). The Finnish ECEC curriculum has a strong emphasis on play, children's socio-emotional growth, and the development of age-appropriate practical skills. When entering ECEC, a personal development plan is created for each child. The plan is prepared in collaboration with the child and their family and comprises goals for pedagogical activities based on the child's own interests and welfare.

Currently, maternal leave lasts for 105 days, after which the parents can decide how to share the 158-day parental leave. There is an additional 54 days paternal leave of which eight days can coincide with the maternal leave (most often once the baby arrives) and the rest after the parental leave. After that, one of the parents can stay home until the child turns three with financial support in the form of an allowance. A parent's employment is secured during maternal, paternal, parental, or home-care leave (i.e., the employee cannot be dismissed by the employer). Recently, several political parties have taken a more critical stance toward home-care leave, as the practice is seen to endanger mothers' employment and career advancement. There are also concerns that some might use the home care leave to earn income from their employer in addition to the parental allowance. There is strong momentum to provide high-quality early childhood education options to prevent this kind of "double dipping." As a first step, some municipalities have cut the additional municipal support for children older than one year. To compensate, the Finnish government has made plans to extend parental leave, potentially tailoring it for fathers. The discussion seems to repeat the old controversy of Cygnaeus and Snellman (see Chapter 1) of the right of families to shape the education and upbringing of their children.

Pre-primary Education

Pre-primary education for six-year-olds is not strictly speaking compulsory, but since 2015, guardians are expected to enroll their children in pre-primary education "or other activity fulfilling the goals of pre-primary education" the year they turn five. Pre-primary forms the latest addition to the Finnish education system and is arranged free of charge in daycare centers or in schools (80 percent and 20 percent, respectively). The municipalities are obliged to arrange pre-primary education for all children living in the municipality but private

providers of ECEC and state schools (i.e., language schools) can obtain permission to organize pre-primary education.

Pre-primary education was preceded by a long-established free half-day preschool program offered in daycare centers for six-year-olds. In 2014, 98.5 percent of children across the country attended preschool, whether in half-day or full-day programs. Even if Finnish pre-primary education is less strictly "academic" than its counterparts in the US or France, for example, it presents a clear step in the continuum from ECEC to basic school. Like ECEC, pre-primary education follows a national core curriculum (see Chapter 6).

Lately, in accordance with findings regarding the positive impact of ECEC on children's cognitive and non-cognitive development (Hall et al. 2013; Repo et al. 2019), several municipalities have invested in the extension of free (as compared to tuition-based ECEC) pre-primary education to five-year-olds.

Basic Education

Finland's compulsory basic education (*peruskoulu*) provides a general education according to a comprehensive national core curriculum for grades 1–9, organized in either fully comprehensive schools (grades 1–9) or in separate primary and lower secondary schools (grades 1–6 and 7–9, respectively). Basic education may include an extra year (year 10), mostly chosen by students who wish to raise their GPA to access a desired upper secondary program or school. Like ECEC and pre-primary education, basic education is provided in both national languages, Finnish and Swedish, and in Sámi in the Sámi region. Students enter basic education the calendar year they turn seven. As repeating a school year is rare, most students finish basic education the year they turn 16. Before its extension under the 2020 law (Law 1214), compulsory education lasted from grade 1 to the end of basic school at grade 9 or until the year the student turned 17. Under the new law, which went into effect in 2021, compulsory education extends to age 18, beyond the age at which most students complete upper secondary school. Students do not take an exit exam as part of the transition from basic to upper secondary, but they do receive a final report card (see Chapter 10). The GPA recorded in this report card has significant implications for which courses students can take in upper secondary education (see Chapter 4).

Provision of basic education is the obligation of municipalities and the few independent schools that are part of their respective municipal school systems (see Chapter 6). Regardless of the structure of the school (separate primary/lower secondary or comprehensive), instruction is based on a classroom teacher model for grades 1–6 and a subject teacher model for grades 7–9. Each student is guaranteed a place in a local school to ensure commutes are as safe and short as possible. When the commute to school is lengthy or difficult, the municipality is obliged to provide free transportation, whether buses or public transit vouchers.

All education and education materials, including textbooks, exercise books, pencils, and in many schools even laptops, are free of charge. Most sports equipment is also free but must remain at school. Students are also provided a daily warm meal, a practice originating before WWII but made law in 1948. There is no statutory maximum for class size in general education, but special education classes (see Chapter 10) are restricted to 10 students. The school year comprises 190 school days and the school year for basic education is divided into two parts: the autumn term and the spring term, with schoolwork beginning in mid-August and ending on the last day of week 22 in May or June with an approximately 10-week summer break in between. Within these guidelines, the education provider can set term start and end dates and the length of autumn, Christmas, and Easter breaks. The traditional one-week winter break is arranged in February on a regional basis in three stages to secure winter conditions for all but to avoid overcrowded winter sport facilities.

Instruction time in Finnish basic education is among the lowest in the world (Sahlberg 2011, 63). The maximum number of lesson hours (an hour equaling 45 minutes of instruction with a 15-minute break) per day is five for grades 1 and 2 and seven for higher grades (see weekly hours in Table 1). Overall, Finnish students receive 6,300 hours of instruction during their nine-year basic education, which is over 1,200 hours less than the OECD average.

Table 1 Lesson Hours Per Week at Different Grade Levels

	Lesson Hours Per Week
Grades 1-2	19 hours
Grade 3	22 hours
Grade 4	24 hours
Grades 5-6	25 hours
Grades 7-8	29 hours
Grade 9	30 hours

Source: National Core Curriculum, 2014

Compulsory education covers all children with permanent residence in Finland. Basic education is obligatory, but school attendance is not mandatory (Jakku-Sihvonen et al. 1996, 23). While home schooling is an option in Finland, few choose it, with just 250 families participating across the country (see https://hslda.org/post/finland). For those that do homeschool, municipalities must confirm that parents are fulfilling their children's educational rights and follow the learning outcomes of all students. Through parent

request or the recommendation of ECEC (with parental approval), the beginning of basic school can be postponed or accelerated by a year based on the cognitive or socio-emotional maturity of the child. Likewise, children for whom nine years is insufficient to complete basic education due to a disability or illness are allowed an extension of two additional years. All students have a right to receive support sufficient to assist in learning and attendance as soon as the need for support is detected (see Chapter 12).

Basic education has a single structure with goals, content and assessment criteria detailed in the national core curriculum (NCC) (see Chapter 7). In grades 1–6, a class teacher teaches most subjects to their class while in grades 7–9, all subjects are taught by subject teachers according to their academic credentials. The syllabus contains 18 compulsory subjects during basic education, listed below. In grades 1 and 2, the number of separate subjects is eight with the number of subjects increasing with the grade levels. Schools have some autonomy regarding when individual subjects are taught. In basic education, all children study the following subjects at some, if not all, grade levels: Mother tongue and literature (Finnish, Swedish or Sámi), the other national language (Swedish or Finnish), foreign language(s), mathematics, environmental studies, religion or ethics, history, social studies, biology, geography, physics, chemistry, health education, music, visual arts, crafts, physical education, home economics, and guidance counselling. The lesson plan also recognizes "optional studies" that the municipality or school can offer in addition to those mandated by the national lesson plan (e.g., additional foreign languages, ICT, extra courses in the non-academic subjects, or other). These differ by education provider in quantity and content, with richer municipalities able to provide more offerings, and are seen as a driver of educational inequality among students.

Upper Secondary Education

Finnish secondary education conforms to the classification of ISCED 2011 with independent stages for lower secondary education (ISCED level 2) as part of the compulsory basic education and non-compulsory upper secondary education (ISCED level 3) arranged in a dual structure of general or academically oriented education and vocational education and training. Upper secondary education became compulsory in 2021 but prior to the recent law had enrolled almost 98 percent of the age group. Still, close to 15 percent of 25-year-olds are without a secondary certificate, almost all from vocational school. The dual model makes the transition from basic school to upper secondary education a decisive moment in the life of a young Finn. As there is no exit exam at the end of the Finnish basic school, admission to upper secondary schools is based primarily on a student's grade point average (GPA), meaning the grades given by the students' own teachers. For the general upper secondary schools, only the student's GPA in academic subjects is taken into account, while for some special schools or programs (e.g., a high school of the arts) student selection is based on a combination of the academic GPA and a test or other documentation of aptitude. For vocational education and training, student selection is based on the

GPA covering all mandatory (i.e., academic and non-academic) subjects with possible program-specific credit awarded for extra-scholarly accomplishments and activities.

The two tracks of upper secondary education are regarded as of equal weight, which is evidenced by both offering qualification for tertiary education in either a research university or in a university of applied sciences. Both tracks are based on a nominal three years of full-time study, but the students can extend their studies to last four years. In 2016, 81 percent of general upper secondary school students and 68 percent of vocational school students received their certificate in three years.[3]

All basic and upper secondary education is free for students, including school lunch. Before the extension of compulsory school to age 18, students in upper secondary schools paid for their own study materials. Financial support was available for students with limited family income. These have since been made free.

Choice of Upper Secondary Education

Students make their choice of upper secondary education during the last semester of basic school, in grade 9. Their decision-making is supported by two courses of guidance counselling (*oppilaanohjaus*, a mandatory subject in lower and upper secondary education) in grades 7–9, along with optional one-to-one discussions with the guidance counsellor (see Goman et al. 2020). Each student can rank their top five choice schools among all the upper secondary education programs offered across the country. Based on these choices, each institution fills its study places according to the GPAs of the applicants and other credits as relevant. Thus, if all the places in a student's first choice program are filled by applicants with higher GPAs, the application will be transferred to the second choice, and so on. If even the fifth choice has enough applicants with a better GPA, the student will be left without a place. Once all places have been filled, all applicants will be told to which school or institution they have been accepted. Schools that have not succeeded in filling all their places will open them for a new cycle of applications from students who have not been accepted yet to any school. Students who are still without a study place after the auxiliary cycles can apply to a grade 10 in a basic school to raise their grades for a new application cycle the next year.

Students' choice of upper secondary education is strongly affected by their academic achievement and their learning-related attitudes. In general, students who apply to the academic program have, on average, a higher GPA than those who apply to the vocational one (Kupiainen 2016b, 2019b). The dropout rate in academic upper secondary is low but both dropouts and transfers among programs are relatively common in vocational

[3] Statistics of Finland: https://www.stat.fi/til/opku/2018/opku_2018_2018-03-14_fi.pdf

education. This explains the continuing challenge with getting all young people upper secondary certificates, the primary reason behind the extension of compulsory education to age 18.

General Upper Secondary Schools

Most general upper secondary schools offer a single academic program with a wide array of choices for students to build their own paths through the syllabus. Some upper secondary schools specialize in mathematics, music, visual arts, sports, or some other subject, allowing students to substitute some of the mandatory courses with extra courses in the respective subject. In addition, the International Baccalaureate (IB) program is offered in 19 upper secondary schools across the country and the German EB in one. Due to the GPA-based student selection system, upper secondary schools form an academic hierarchy, especially in the bigger cities. In 2016, there were 388 general upper secondary schools with a yearly intake of around 35,000 students, meaning a little over half of the age cohort. The number of schools has since decreased somewhat due to the shrinking age cohorts and a tendency toward bigger schools in the urban centers to guarantee a wider scope of course offerings.

During the 1990s and early 2000s, Finland transitioned from the traditional three-year structure of the general upper secondary curriculum to a new structure which divided the syllabus for each subject into independent six-week-long courses offered successively during five periods across the school year, ending with course-specific exams during an exam week at the end of each period. In the new Core Curriculum of 2019, the structure was further modified to smaller, more flexible combinations of modules (see Chapter 7). Students are to build their own syllabi from these courses for the three to four years of studies, most often with five to six courses per period. The choice of courses is confined by the distribution of lesson hours stated in a government decree with the compulsory syllabus comprising 18 subjects. In addition, many students study additional foreign languages at either the advanced level (continuing from the comprehensive school) or beginning in the upper secondary school. Most schools offer additional courses in a variety of subjects from information and communication technologies to drama. The requirement for graduation is 75 courses. Of these, 47 are mandatory (51 for students of advanced or A-level math). The number of mandatory courses per subject varies from one (e.g., chemistry, philosophy, physics, psychology, and health education) to 10
(A-level mathematics), leading to widely varying personal syllabi.

The Finnish matriculation examination, which acts as the exit exam from the general upper secondary school and is the only national high stakes test in the school system, comprises independent exams for each academic subject (see Chapter 8). The exams are tied to the goals and content of the mandatory and specialization courses for each subject and can be seen to provide common standards, somewhat comparable to the assessment criteria of the basic school core curriculum. The matriculation examination results have always given students extra credit over the traditional entrance examination when applying to tertiary education. A 2018 reform reinforced

this advantage by requiring that a majority of students would be chosen solely on the basis of their matriculation examination results and a minority solely on the basis of an entrance exam, in order to hold students to a more consistent standard for entry (see Chapter 9). As the syllabi for the different subjects varies widely, the universities created a ranking of credits for the different subjects and grades based on the number of courses involved and data of the overall success of students sitting for the different exams. It is too early to say what the full impact of the reform will be, but already it seems to have influenced students' subject and matriculation exam choices (see Chapter 16).

Vocational Education and Training[4]

Before the onset of compulsory upper secondary education, approximately 95 percent of young people continued their studies directly in upper secondary education, with about 44 percent of them annually choosing VET. There are in total over 160 VET providers across the country offering more than a hundred different programs, including auto-mechanics, restoration, construction, commerce, social work, and health. Several providers offer either the same or different programs in more than one location, but a given institution may offer only a limited range of programs. Especially in rural areas, this restricts students' choices or forces them to leave home. The extension of compulsory education, which makes school transport free, along with the shrinking number of children in sparsely populated regions, will cause significant challenges for the viability of some of these institutions.

Most VET institutions are either municipal or run by a consortium of municipalities, but there are five institutions, including the Maritime Safety Training Centre and the Sámi Education Institute, which are run by the national government. Swedish-language training is provided in both exclusively Swedish-language and bilingual institutions. The VET institutions serve varied student bodies: Upper secondary students, adults studying for an upper secondary vocational degree and adults supplementing an earlier vocational degree or looking for tailored shorter learning modules to supplement their work experience.

Finnish VET has gone through several reforms and restructurings since the 1970s education reform, and since the 1990s it has gained equal status with general upper secondary education vis-à-vis entrance to higher education. Reflecting this, Finnish upper secondary VET education is largely school-based with work-based practice and training interwoven in the program. Such practice can be obtained at a workplace outside of school, but many vocational institutions operate work training programs in the form of restaurants, hair salons, auto-

[4] This section is mainly based on Eurydice 2020a.

repair shops and other service providers open to the public where students practice their professional skills under supervision of their teachers. Student participation in these programs is high, at about 90 percent. Even so, most VET qualifications can also be obtained through apprenticeship training. In the latter, the training takes place at the workplace in the form of work assignments as part of the employment contract, complemented with learning in an educational institution if needed.

In the new personal competence development plans, introduced in the latest VET reform of 2018, students' skill development is followed individually, and they only need to learn the skills they do not yet have. The plan identifies and recognizes the skills the student has previously acquired and outlines what competences they still need to learn and how they can be acquired in different learning environments. A teacher or guidance counsellor puts the plan together with the student and, when applicable, a representative from working life. In the public discussion around extending compulsory education to 18 years, one of the topics raised by the Trade Union of Finnish Education (OAJ), among others, was how to ensure adequate counselling services for all secondary education students in the future (OAJ 2020).

This will indeed be a future challenge in VET, as maintaining a high standard of teaching and counselling services is required by legislation. The utilization of ICT, distance and e-learning, and co-operation among education providers are central means to reach the objective.

As vocational education often is the choice for students with broken or delayed educational paths (see Kantasalmi et al., in press), it offers wider entrance options, including a continuous application system throughout the year, and the possibility of entering apprenticeship training through direct contact with a VET provider. Moreover, unlike for general (academic) track schools, the admission criteria for VET consider not only the applicant's previous study record (GPA and possible grades in subjects relevant for the field of VET) but also relevant work experience. VET providers can also use entrance and aptitude tests or interviews to support student selection. A small number of VET students come from general upper secondary education applying for VET programs instead of tertiary education.

Upper secondary VET students are mainly between the ages of 16 and 25. There are often students of different ages in the same class due to changes in students' program choices. There are no official recommendations regarding the maximum and/or minimum number of pupils/students in a class or group but the limits for intake in a specific VET institution are based on practical considerations regarding necessary machinery or other instruments. Like all upper secondary education, VET is based on three years of full-time study but can be extended to four. The course of study comprises general subjects (e.g., mathematics, languages, social studies), and profession-specific subjects. VET programs are strongly gendered with predominantly female enrollment in

social and health-related programs, predominantly male enrollment in technical programs, and relatively even enrollment in fields of commerce and hospitality.

The Finnish Dual Model of Tertiary Education

Since a reform of higher professional education in the 1990s when the former mid-level professional or vocational schools were promoted to the level of tertiary education, Finnish tertiary education has comprised a dual structure resembling (but not tied to) the structure of upper secondary education. With the post-1990s reform, the number of Universities of Applied Science or, as they were originally called, Institutes of Higher Professional Education, doubled, expanding the educational opportunities for students coming from both tracks of upper secondary education. While students coming from vocational education make up under five percent of the student body at research universities, the percentage is around 40 at universities of applied sciences.

Currently, the Finnish higher education system comprises 13 universities and 22 universities of applied sciences (*ammattikorkeakoului*) under the administration of the Ministry or Education and Culture, as well as the National Defense University under the administration of the Ministry of Defense. The main task of universities is to pursue research and to provide highest-level education in the respective fields while the universities of applied sciences focus on applied (professional) research, development, and innovation. In addition, most universities (both research and applied) provide non-degree education through their own open university programs or organizations. Universities differ in size and number of disciplines. The biggest is the University of Helsinki, at over 30,000 students.

Finnish universities follow the letter of the EU's Bologna process, which harmonized degrees across Europe, by structuring studies into the two levels of bachelor's and master's. The former is seldom treated as an independent degree in Finland, and students apply to and are accepted for studies at the master's level even if there might be an interim BA. Most universities opposed the two-level system at the time Finland adopted the Bologna process, partially due to the low status of the BA degree on the job market.

Higher education in Finland is free and the government provides students financial support during their studies for a first degree, including support for housing. The idyllic picture is complicated, however, by a serious logjam of applicants to higher education, so that each year only a third of students find a place in higher education the year they graduate from upper secondary education (see Chapter 10). Even the oft-touted fact of Finnish education programs being able to cherry-pick the best 10 to 30 percent of classroom teacher applicants each year must be understood within the context of each round of applicants comprising matriculates from several years. Students accepted to classroom teacher programs are among the oldest entering graduate programs in Finland,

perhaps due to the fact that many of them must reapply a second or third time after not being accepted initially (Kupiainen et al. 2018, 63).

In addition to the degree-providing higher education programs in universities, since the 1970s Finland has offered university-level education in its so called "open university" (*avoin yliopisto*), which, unlike its British counterpart, is not an independent institution but semi-independent branches of most universities. The history of Finnish open university education lies in the general liberal education of the 1800s, when schools were established to offer people without a prior certificate the opportunity for higher education courses that would allow them to apply to university. Today, however, open university is largely used as a preparatory phase for students wanting to enter university either through the normal entrance examination or through a special quota for open university students. The open universities do not award full degrees but offer university-level courses equivalent to those offered at degree-granting universities. Degree-granting universities can also offer open university courses for the purposes of "personal self-development" or for credit.

The 2021 higher education admission reform will reinforce the role of open universities, as it increases the quota of students entering degree programs based on studies in the open university. Some have criticized this as studies at the open university are not free (even if the fee is quite reasonable) and students do not receive the same financial support as degree-students.

Basic Education for the Arts

Arts and crafts hold a central position in the Finnish curriculum starting in elementary school. This emphasis is not restricted to mandatory comprehensive education but is also visible in the official status of arts education offered for a moderate fee by publicly supported institutions functioning outside of formal schooling. These institutions, which children attend as extracurricular activities, offer goal-oriented, basic education in the arts programs in various fields (architecture, circus, dance, handicraft, media art, music, theatre, verbal art, and visual arts) for students of basic and upper secondary school age. While some of these, especially visual arts and music, are also included in the curricula of both levels of education, the education offered by the arts programs exceeds the school curriculum in intensity and level of requirements. All programs follow a national curriculum with clearly defined steps of advancement, some even including regular assessment in the form of field-appropriate examinations. All the programs also provide students with certificates attesting to their advancement. Due to the fees attached, regional differences in availability and other societal factors, attendance in the arts programs is assumed to be more common for children from higher SES families, although no systematic research has been done in the field.

5

Teachers and Teacher Education

The transfer of classroom teacher education from teacher seminars to research universities in the 1970s made becoming a teacher an enticing prospect for students, particularly women, as they considered what field to enter in the university. In recent years, however, there have been signs that the teacher profession may be losing its appeal. In this chapter, we will look at the history and current trends in Finnish teacher education, including the cherished tie between pre-service education and university practice schools. In these, future teachers practice their developing professional skills in real settings as part of a collegial group, under the tutelage of an experienced teacher.

History of Finnish Teacher Education

The roots of Finnish teacher education lie in the early universities where Finnish students studied during the Middle Ages. Maybe the best known among these students was Mikael Agricola, later called the Bishop Turku and recognized for his views on evangelical theology and teaching common people in their own language to prepare them to read the Bible. He wrote an ABC-book, which began with a poem on the principles of common education and contained the first Finnish text for the Catechism. This led to the strong tie between education and religion and ultimately to making confirmation in Lutheranism—which required literacy and knowledge of the Catechism—a requirement for marriage. Not all landowners (i.e., estates) approved of the requirement but nonetheless contributed to the spread of schools throughout what is now Finland. The first factory schools were established in the 1600s and, especially from the late 1700s on, different groups established and ran schools. Many of them were short-lived, however, for financial or other reasons. The teachers at most of these schools lacked formal education, as the only teacher seminar was located in Turku (running from 1806–1826) and it prepared teachers only for grammar schools.

By 1890, Finland offered four teacher seminars, two in Finnish language with separate sections for men and women, and two smaller ones in Swedish. In addition to training badly needed teachers, the seminars offered an economic and intellectual boost to the municipalities where they were located. Indeed, with the expansion of schools across Finland, the shortage of teachers had become a serious problem, and unqualified teachers were

especially common in schools with instruction in Finnish, which was a relatively new language for education. Almost yearly, the Senate engaged in heated discussions about the founding of new seminars. The economic boost from a seminar clearly exceeded its costs, and even many private one-year seminars were established. Yet as late as school year 1900-01, many more students still attended itinerant-led church schools than municipal elementary schools (197,811 compared to 111,765) with the new teacher seminars serving only the latter.

The rise in the number of schools after the 1898 Decree on Education Districts led to the establishment of short one-year teacher education courses in the seminars for students who had passed the matriculation examination. Finland considered a proposal for university-level teacher education. Ultimately the proposal was dismissed.

After independence, sports and culture were added to teacher education, with a hope of using these activities to unify a country torn apart during the civil war of 1918. As such, elementary school teachers began to assume the role of "cultural fermenter" in the village. Although Finland established a committee to further develop teacher education in 1918 to create a structure with separate programs to train teachers for different school levels, a lack of financial resources meant no actions were taken. Finland did not move ahead with this agenda until the 1921 law on compulsory education created demand for new teachers. The country established seminars offering two-year education for teachers of lower elementary school, the bedrock of education. The decision to focus on lower elementary schools and kindergartens was influenced by Swedish author Ellen Key, whose book *The Century of the Child* emphasized the importance of early childhood.

Finally, in 1934, the long-held aspiration to establish classroom teacher education with entry based on grammar school matriculation examination was realized with the establishment of a Higher School of Education (*kasvatusopillinen korkeakoulu*) in Jyväskylä. In addition to the two-year program granting teaching certificates, the institute provided education at the master's and doctoral level.

The war years (1939–1945) created upheaval in education, with schooling continuing in some parts of the country and ceasing in others, as schools were made into barracks and hospitals. The interruptions included teacher education and it took time for the seminars to reestablish themselves after the war, often in new locations. The scope of the job also changed, with many lower elementary positions changing to include the upper elementary grades as well. To cope with the post-war teacher shortage, temporary teacher colleges (*opettajakorkeakoulu*) were established in Helsinki, Turku, and Oulu from 1949–53. Eventually these colleges merged with their respective universities as educational faculties. In 1957 Finland passed a law establishing middle school as the entrance requirement for teacher education with a two-year preparatory program for those with only an upper elementary education.

The developments leading to the adoption of the basic school (see Chapter 3) also marked a total rupture in teacher education. The 130-year-old tradition of elementary school teacher seminars came to an end with passage of the new law on teacher education in 1971, which transferred the education of classroom teachers to universities.

The Transfer of Teacher Education from Teacher Seminars to University

The transfer of teacher education to university brought about a considerable change both in the role of teachers and in the pool of prospective new students. This "upgrade" of teacher education transformed teaching into a high-status profession that for decades drew many talented candidates. The status of Finland's teachers attracted worldwide attention when Finland emerged as a top performer on PISA in the early 2000s. The reform itself came at a time when the structure of school changed, requiring teachers to be able to teach a broader set of students and for all students to be able to finish basic education.

Until the creation of the comprehensive school, classroom teachers taught the whole age cohort for only the first four years, at which point a growing share of students transferred to grammar schools. Under the new structure, classroom teachers were expected to teach all students for six years, following a curriculum that incorporated many elements from the former grammar school curriculum and exceeded the old elementary school standards. Subject teachers, on the other hand, who had previously taught only those students who had passed the grammar school entrance examination, were now teaching what some considered a less rigorous version of the curriculum to the whole age cohort. Accordingly, teacher education needed both long-term reform to prepare a new generation of teachers for comprehensive school instruction and extensive, short-term in-service education to see the current teacher corps through the transition.

The university-level teacher education started poorly. The field was considered low status by other academics and had few international predecessors to provide guidance. Instead, the program and teaching methods were adapted from the earlier teacher seminars (renamed teacher-training institutes in the 1950s). The educational level of the staff was low, and the intake of new students was large. Even many of the university-level teachers guiding the practicums had only an elementary school-based education. Given these problems, it was not unexpected that the new teacher education came under fire in the 1980s. (The possibility of transferring teacher education from the universities into the new universities of applied sciences then under development was proposed.) The integration of early childhood education into the still struggling teacher education departments during the 1990s further weakened the status of teacher education as an academic discipline.

The faculties of education soon launched a "counter-strike" to elevate their field. They created new positions for professors and university lecturers, encouraging teacher-trainers to seek new academic credentials. Based on the

German model, professors were nominated for all the key subjects of the basic school curriculum. The field of teacher education also slowly created a new academic identity for itself, "educational sciences," complete with the requisite doctoral degrees and academic publications.

The educational sciences department at the University of Helsinki was especially active in stressing the research-based nature of university-level teacher education as compared to the didactics-oriented education of the former teacher seminars (see Säntti et al. 2014, 2018, Chapter 15 for a critical view on the development). This approach became a central feature of Finnish teacher education, introducing the paradigm of the "teacher as a researcher" as a guiding principle of its program, and establishing new research units and professorships. Teacher training programs follow the same academic structure as other programs requiring a master's thesis. Consequently, research has become ever more important to the professional profile of teacher educators, changing their role in some cases from teacher educators to educational researchers.

Pre-Service Teacher Education

The general objective of teacher education is to ensure that graduates are ready to work independently as teachers, educators, and counsellors. Teacher education covers several types of teachers, but we will focus in this chapter on the education of classroom and subject teachers who form the main teaching corps in the basic school. As we've explained, the basic school comprises the primary grades of 1–6 with classroom teachers responsible for the teaching of most subjects in their class, and the lower secondary grades 7–9 where subject teachers, responsible for one or more subjects, provide all teaching. In addition, the basic schoolteacher corps comprises special education teachers who either teach a class of their own or support students in regular coursework either in the classroom or in a separate location (see Chapter 10). Teachers of home-economics and crafts differ from the other subject teachers as their courses are offered only as electives for students.

Classroom Teachers

Most university programs are quite competitive, as there are many fewer places in the university than there are students who pass the matriculation exam at the end of upper secondary school (see Chapter 9). This was especially true of teacher education until just a few years ago when the number of candidates applying to teacher education began to decline. Despite the recent decline in applicants, classroom-teacher education remains a sought-after program for students after graduating from the general upper secondary. The recent decline in applications has been quite sharp, however: around 2010, only one in 10 applicants was accepted to the programs, whereas in 2020, the share of accepted applicants had risen as high as one-third in some universities. Still, Finnish university teacher education programs are much more selective than in many other countries.

Prior to the university admission reform of 2020 (the impact of which cannot be studied yet) the student selection process was three-tiered, consisting of a written entry exam based on preassigned material, the results of the applicants' matriculation examination, and an individual or a group interview. The written exam was common for all eight universities providing teacher education, but the universities weigh the three components according to their own priorities. The impact of this on student selection is hard to decipher as applicants in the different universities also differ in terms of their matriculation results (the only standardized data available). In addition, as there is no separate licensing for teachers there are no data on the impact of the possible differences.

Until the recent restructuring of many university programs to better conform to the Bologna process with its two-tier degree structure, classroom-teacher students entered a five-year education studies program that led to a master's degree. The basic structure and content of the program are presented in Table 2.

Table 2 The Structure of Classroom-Teacher Studies

Language and communication studies	20 + 4 ECTS*
Basic studies in education	25 ECTS
Main subject studies	35 ECTS
Multidisciplinary studies and cross-curricular issues	60 ECTS
Optional (minor subject) studies	40 + 36 ECTS
Optional advanced studies in education	80 ECTS

*European Credit Transfer and Accumulation System

Source: Ministry of Education and Culture

Included in the above are 70 ECTS of research studies and 20 ECTS of teaching practice, including 120 hours of supervised teaching in pairs.

In addition to the basic courses, many students choose to complete a major in an academic subject (e.g., history or mathematics) which provides them a subject teacher qualification for lower (but not upper) secondary education.

The 2020 reform led the University of Helsinki (UH) to restructure teacher education to reflect the two-level (bachelor's and master's) model of the Bologna process—although, in a sign of Finland's resistance to full adoption of the Bologna process, students still apply directly for the right to a master's degree. There is no common bachelor's degree in teaching; rather, students apply to one of six different programs—early education,

classroom, adult and general educational sciences, home economics, crafts, and special education—of which early education is the only one to allow teachers to teach with a bachelor's degree. All others require students to continue on to get the master's degree. The first three programs are offered at the UH also in Swedish. The three-year bachelor programs are equivalent to 180 ECTS and include a minor thesis. The degree of Master of Education allows the recipients to apply for a doctoral program in other faculties provided the applicant has passed the necessary prerequisites.

Subject Teachers

Unlike classroom teachers, subject teachers pursue their master's studies in the department of their specialization, either in a general program or in a program tailored for subject-teacher candidates. To earn the qualification required for a permanent position in schools, students of both program types can apply to a one-year (60 ECTS) course in pedagogical studies at the department of teacher education. The course includes practice periods like those offered to classroom-teacher students. The same option is available for anyone holding a master's degree in the subject, a path to teaching used fairly often in STEM subjects where there tend to be more open positions. As a result, subject teachers often complete one more year of education than classroom teachers, reflected in their somewhat higher salaries. Except for the subjects Mother tongue and literature (Finnish/Swedish) and sometimes mathematics, most subject teachers acquire qualification to teach two subjects, with history/social studies, mathematics/physics, physics/chemistry, Swedish/German being the most common combinations. As a result, teacher education spans several university departments, with subject faculty playing a central role in teacher education. As we have noted, for most subjects there are many more applicants than placements in teacher-education programs. In the STEM fields, however, where the need for new teachers is greatest, there may be fewer applicants than placements. Even so, if applicants perform poorly on the aptitude test they are not necessarily accepted for teacher education. As there are several points at which students can join the subject-teacher education programs (when entering university, during university studies, after pursuing a master's degree and potentially after spending time in the labor force), the students of Finnish teacher education programs can have very diverse backgrounds generally and pedagogically (Lavonen & Juuti 2012).

PART II

THE LEARNING SYSTEM

In Part II, we present some key issues regarding the Finnish education system. We will focus on the basic school but will also discuss early education and care, upper secondary education and tertiary education as necessary to provide a picture of the factors influencing young Finns' educational paths before and after basic school. We also describe how the Finnish learning system is governed and financed. While Finnish students' high performance on PISA has sparked an international discussion about the decentralization of the system in the 1990s, the role of the national government is still visible in all areas and at all levels.

6

The General Goals of the Finnish Education System

Finnish compulsory education, extended to upper secondary education in 2021, adheres strongly to the heritage of the education reform of the 1970s (see Chapter 3) which focused on equity for all students. Reflecting the aspirations of the reform, the basic school emphasizes educational equity and accessibility rather than high learning standards.

The goals of the Finnish education system can be summarized under three main themes: 1) educational equality and equity, meaning equal opportunities for all learners with an expectation of equal learning outcomes (Kalenius 2020) across genders and socio-economic, cultural, and linguistic backgrounds; 2) an education system that is free to students from early childhood through higher education, and; 3) nationwide accessibility and availability of education. These goals are not necessarily realized in practice, however, according to assessments based on national samples of learning outcomes as well secondary analysis based on a least a decade's worth of data on learning outcomes for different school subjects (e.g., Hildén et al. 2016; Lappalainen 2011; Metsämuuronen 2013; Ouakrim-Soivio & Kuusela 2012).

The central policy objective of the Finnish education system is to guarantee equal educational opportunities for everyone. As discussed in Chapter 4, the education system is built to ensure a no-dead-end network of paths from ECEC to tertiary education to guarantee the fulfilment of the potential of every citizen. ECEC is conceived as the foundation for lifelong learning. Yet, as mentioned in Chapter 4, the participation of Finnish children under five in ECEC lags behind that of most other Western countries. This poses a particular risk for children from lower SES and immigrant-background families and has recently sparked heated discussion, with some municipalities proposing cuts to home-care allowances[5] as a way to increase participation (Vlasov et al. 2018). While pre-primary education was included in compulsory education only in 2015, today many municipalities

[5] For example, the City of Helsinki decided in December 2020 to cut the home-allowance for children older than one: https://yle.fi/uutiset/osasto/news/helsinki_draft_budget_child_home_care_allowance_cuts_more_funds_for_schools_and_metro_upkeep/11643079

have extended it to five-year-old children, increasing this age-group's participation in ECEC to almost 100 percent. Overall, the aim of Finnish education policy is that everyone will complete at least a secondary level qualification. Among the reasons for the recent extension of compulsory education to include upper secondary are to prepare students for the changing demands of the labor market; to prevent the roughly 15 percent of Finnish 24-year-olds who lack an upper secondary education certificate from disrupting their vocational studies; and to reduce the growing number of youth Not in Education, Employment or Training (NEET) more generally. Finland has set an additional goal that half of 24-year-olds will have a tertiary education degree from either a research university or a university of applied sciences. Considering the large share of students choosing the general academic track for upper secondary education and the no-dead-end education system, reaching this goal seems to depend more on the capacity of higher education to absorb students than in the number of eligible students wishing to enter tertiary education. This was seen very clearly again in spring 2020 when the number of applicants to the different programs was almost three-fold the size of the current age cohort finishing upper secondary education, indicating a significant backlog and shortage of places in higher education to meet demand.

Despite its own low-profile assessment policy, Finland has taken part in the comparative assessments of the International Association for the Evaluation of Educational Achievement (IEA) from the beginning to monitor students' learning in basic education and to see how its system stacks up against those of other countries (see Chapter 12). The same principle of system-level monitoring without national standardized testing was adopted for basic education at the national level by the FNBE in the 1990s to monitor the attainment of the goals of the NCC across the country.[6] Likewise, the aim in higher education is to create internationally competitive institutions that also meet regional needs.

Early Childhood Education and Care

Finnish early childhood education is still influenced by the pedagogical thinking of Friedrich Wilhelm Fröbel, brought to Finland by the two philanthropists, Hanna Rotham and Elisabeth Alander, who founded the first Finnish kindergarten in a working-class neighborhood of Helsinki in the late 1800s. This Fröbelian legacy is still visible in the Finnish early childhood education's emphasis on play, children's active role in social and cognitive development, and the social interaction between the caretakers and the child.

Today, early childhood education and care is guided by the Act on Early Childhood Education and Care and the National Core Curriculum for ECEC of 2018. Like all national core curricula, it is a binding norm for all

[6] Participation in the early IEA studies was not through the FNBE but the predecessor of the Finnish Institute for Educational research and thus a more markedly academic endeavor.

early education. All ECEC providers prepare their local curricula based on the national core curriculum. Over 80 percent of ECEC providers are municipal although the number of private providers has increased during the past decade. This is partially due to parents' wishes for a wider scope of options (e.g., daycare centers emphasizing nature, arts, or physical education) and partially to municipalities' inability to flexibly respond to fluctuating demand.

The national control of ECEC is designed to secure equal opportunities for children's development and learning. The guiding principle is that the child's best interest shall always be the primary consideration. The child has a right to wellbeing, care and protection, and his/her opinion matters in decision-making. To ensure this, the teacher draws up an individual developmental plan for each child to be followed and regularly discussed with the child's parents or guardian(s).

The goals defined in the Act on Early Childhood Education and Care, the obligation to take into consideration the child's best interests in the planning and implementation of ECEC, and the national core curriculum are the foundations for all ECEC activities. ECEC consists of education, instruction, and care with an emphasis on pedagogy. ECEC involves not only care but also goal-oriented and systematic activities that support children's development and learning. These activities are to be evaluated on a regular basis and developed to better reach the goals set for ECEC in general and for each individual child. In ECEC, children's earlier experiences, interests and competences are to be to be considered when planning learning and other activities. Children are to be engaged in the planning, implementation, and evaluation of the activities according to their abilities.

The basic tenet of Finnish ECEC is that engaging, goal-oriented, and suitably challenging activities inspire children to learn and will thus enhance the development of their individual potential. Integrative pedagogical activities combining different areas of learning (e.g., outdoor activities including nature studies or cooking introducing mathematical measuring) are believed to lead to broad-based examination of different phenomena. Working methods and learning environments should promote exploration, experimentation, and practicing. Children also have the right to receive necessary guidance and support for learning and development (see Chapter 10).

In Finnish ECEC, emphasis is on the crucial role of play in children's lives, and on the pedagogical possibilities play offers in the promotion of wellbeing and learning. Play is seen to motivate children and to bring joy while allowing them to learn new skills and to create meaning. Strong emphasis is also put on supporting children's social relationships and ensuring every child's opportunity to take part in play and shared activities. Children are seen as active agents and members of their group, and to have their own thoughts and opinions, which merit attention. Children should have opportunities for self-expression and sharing in their everyday life in ECEC, and

to be understood and accepted as they are. The peer group and the experience of belonging to the group are understood as key to children's learning, participation, and wellbeing (for further reading, see EDUFI 2020a.)

Pre-primary Education

Despite being mainly organized in daycare centers attached to early childhood education and care programs, pre-primary education has been provided to all children free of charge since 2014. ECEC, pre-primary and basic education are seen to form a coherent pathway to support the child's development and learning, forming a basis for lifelong learning. The law on basic education governs pre-primary education but not ECEC. Yet, the close connection between ECEC and pre-primary education can be seen in their common emphasis on play and early-education pedagogy. Pre-primary education aims to promote growth, development, and learning and to reinforce the child's positive self-concept and self-efficacy as a learner. These objectives are cultivated through play and imagination in a supportive learning environment. Yet, despite the stress on play and unlike ECEC, pre-primary education is designed to be adequately challenging for the child.

In alignment with other levels of education, pre-primary education is guided by a National Core Curriculum (EDUFI 2016) on which the municipalities base their own curricula and annual plans. Unlike basic education, the pre-primary curriculum is holistic (not divided into subjects) and implemented in units based on the interests of the six-year-old children. Nonetheless, the pre-primary curriculum covers most of the transversal competences of the basic school curriculum: 1) thinking and learning 2) cultural competence, interaction, and self-expression, 3) taking care of oneself and managing daily life, 4) multiliteracy, 5) ICT competence and 6) participation and involvement. In pre-primary education, the competence goals have been divided into five units: 1) the many forms of expression 2) the rich world of language, 3) I and our community, 4) I explore and act in my environment and 5) I grow and develop.

Assessment in pre-primary education emphasizes the development of the child's growth and learning process in constant interaction between the child and the teacher. There is no official report card, but teachers inform guardians about their children's development in regular discussions.

Basic Education

Finns see basic education as the backbone of their education system. Children enter basic education the year they turn seven, in most cases after one or two years of pre-primary education.[7] Before the law of 2020,

[7] Statues allow for later or earlier entrance due to medical or other reasons. The student's guardians make this determination through an official process with a psychologist or other professional.

compulsory education ended when a student had completed the basic education syllabus or 10 years had elapsed since they entered compulsory education. Basic education has two foci: the fostering of students' growth as human beings (*kasvatus*) and learning (*opetus*). The objective of basic education is to support students' growth toward ethically responsible membership in society and humanity, and to provide them with the knowledge and skills needed in life.

In the National Core Curriculum (NCC), basic education draws on four underlying values (see Box 1 (EDUFI 2014/2016, 15–17)):

1. The uniqueness of each student and their right to a good education
2. Humanity, general knowledge and ability, equality, and democracy
3. Cultural diversity as a richness
4. Necessity of a sustainable way of living

Box 1. Values Underlying Finnish Basic Education

Uniqueness of each student and his or her right to a good education

Emphasizes how each student has the right to grow into his or her full potential as a human being and a member of society. To achieve this, the school should provide encouragement and individual support as well as experiences of being heard and valued in the school community. Students should also feel that the community cares about their learning and wellbeing. Experiences of participation and opportunities for working together with others to advance the functioning and welfare of the community are seen as equally important.

Each student has the right to a good education and success in his or her studies. In learning, students are understood to be building their identities and personal philosophies and finding their place in the world. At the same time, they come to understand other people, their society, the environment, and different cultures. Exclusion from learning constitutes the violation of a child's educational rights which in turn forms a threat to his or her healthy growth and development. Basic education creates preconditions for lifelong learning and is a crucial element of a fulfilling life.

The development of strong character has emerged as a newly important aspect of education in a world where young people have access to a constant flow of global news, digital information and social media. Discussions guide students to recognize the values and attitudes they

encounter and to think about them critically. Students shall also be supported in building their personal value systems. Cooperation between the school and the home in this area promotes security and students' overall wellbeing. The school staff's open-minded and respectful attitude towards different religions, views, traditions, and conceptions of education lays the foundation for constructive interaction.

Humanity, general knowledge and ability, equality, and democracy

Basic education supports the student's growth as a human being who strives for truth, goodness, beauty, justice, and peace. In personal growth, conflicts between aspirations and reality unavoidably arise. Being able to address such conflicts ethically and sympathetically and having the courage to stand up for what is good are part of general knowledge and ability. Knowledge and ability also mean that individuals and communities can make decisions based on ethical reflection, putting themselves in the place of another person, and consider outcomes based on knowledge. The perspectives of ethics and aesthetics guide the students to think about what is valuable in life. General knowledge and ability manifest themselves in our attitudes to ourselves, other people, the environment, and information, in the ways we act and in our willingness to take action. Educated persons strive to act correctly and show respect for themselves, other people, and the environment. They can use information critically. An effort towards self-regulation and accepting responsibility for our own development and wellbeing are also part of general knowledge and ability.

Basic education is built on respect for life and human rights. It directs the students to defend these values and to appreciate the inviolability of human dignity. Basic education promotes wellbeing, democracy, and active agency in civil society. The development of basic education is guided by the goals and extensive principles of equality and equity. Education contributes to promoting economic, social, regional and gender equality. Education shall not demand or lead to religious, philosophical, or political commitment of the students. The school and education may not be used as channels of commercial influence.

Cultural diversity as a richness

Basic education is built on a diverse Finnish cultural heritage. It has taken shape and is being formed in interaction between different cultures. Education supports the students in building

their personal cultural identity and their growth into active actors in their own culture and community while promoting their interest in other cultures. It also reinforces creativity and respect for cultural diversity and promotes interaction within and between cultures, thus laying a foundation for culturally sustainable development. In basic education, people from varying cultural and linguistic backgrounds come together and get to know many different customs, communal practices, and beliefs. The students learn to look at issues from the perspectives of other people's life situations and circumstances. Learning together across the boundaries of languages, cultures, religions, and beliefs creates a setting for genuine interaction and communality. Basic education lays the foundation for global citizenship that respects human rights and encourages the students to act for positive change.

Necessity of a sustainable way of living

Humans are part of nature and completely dependent on the vitality of ecosystems. Understanding this plays a key role in growth as a human being. Basic education acknowledges the necessity of sustainable development and eco-social knowledge and ability, follows their principles, and guides the students in adopting a sustainable way of living. Sustainable development and ways of living comprise an ecological and economic dimension as well as a social and cultural dimension. The leading idea of eco-social knowledge and ability is creating ways of living and a culture that foster the inviolability of human dignity and the diversity and ability for renewal of ecosystems while building a competence base for a circular economy underpinned by sustainable use of natural resources. Eco-social knowledge and ability means that the students understand the seriousness of climate change and strive for sustainability. The way humans develop and use technology and make decisions about technology is based on their values. They have a responsibility to steer technology into a direction that safeguards the future of humans and the environment. In basic education, the students examine the conflicting aspects of our modes of consumption and production in terms of a sustainable future and seek and jointly practice solutions that improve our way of living over the long term. Basic education broadens the students' horizons, allowing them to appreciate their cross-generational global responsibility

Source: National Core Curriculum, 2014

Upper Secondary Education[8]

The goal of **general upper secondary education** is to support students' development into thoughtful, decent, and enlightened individuals and active members of society, and to provide them with the knowledge, skills, and capabilities they will need to succeed at work, in their leisure pursuits, and in their lifelong learning and personal development (Act 714/2018). The common aims of general upper secondary education are continuous self-development, responsibility, empathy, curiosity, togetherness, and perseverance.

The common objectives of the subjects are crystallized as transversal competence areas like those presented above for basic education: 1) wellbeing competence, 2) global and cultural competence, 3) ethical and environmental competence, 4) multidisciplinary and creative competence, 5) interaction skills, and 6) civic skills. Transversal competences contain skills in life management and responsible involvement. All study units at general upper secondary school aim for developing transversal competences (National Agency for Education 2020b).

The purpose of **vocational education and training** (VET) is to increase and maintain the vocational skills of the population, develop commerce and industry, and respond to its competence needs. VET supports lifelong learning and students' development as human beings and members of society. It provides students with knowledge and skills necessary in further studies and promotes employment. Vocational education and training also enable pupils to continue their studies in higher education (National Agency for Education 2019, 6).

Also, the legislation on vocational education and training is based on the principle of lifelong learning (LLL), continuing throughout an individual's career and life with the principle of "continuous learning." In VET for secondary school students, this means that students can continue studies at an upper level of education at any phase of their lives, independent of their previous choices. For tertiary education, this can either happen through entrance examinations or via Open University (see Chapter 6). The recognition of prior learning aims to avoid any unnecessary overlapping of studies.

The new LLL policy emphasizes finding solutions that would more effectively combine work and study. To better recognize and acknowledge the learning that takes place outside of school, the competence-based qualifications of vocational education and training emphasize work-based experience and are often realized at

[8] We cannot assess the impact of the 2020 law extending compulsory education through upper secondary school (Law 1214/2020) as the first age cohort since its passage will not graduate until 2025. Accordingly, this chapter has been written in view of the situation as it was before the reform.

the workplace, and assessed by evaluators from both the education institution and the employer. Since the VET reform of 2018, a personal competence development plan has been prepared for each VET-student to support the smooth interaction of work and school. In the plan, the student's prior skills and experiences are documented and recognized to help outline what competences the student still needs and how they can best be acquired in the different learning environments available. The plan is drawn in collaboration between the teacher or guidance counsellor and the student and, when applicable, a representative from the world of work.

Students' individual circumstances, goals, and skills are considered whenever training is planned. Individual learning pathways are designed to help students gain an occupation or progress in their career. In addition, vocational education and training provides knowledge, skills, and competences that students can tap into when they need to learn new skills in the future. The approach to learning in VET is centered on the idea that students are competent and goal-oriented agents. Continuous learning is not only about the development of skills over time, but also about how learning environments adapt to the individual's situation in life. Vocational education and training are part of a continuum on which prior learning is identified, and teaching is focused on new skills.

The objectives of vocational education and training are to raise the general level of professional knowledge, skills, and competences in Finland, on the one hand, and to support individuals' professional growth and lifelong learning, on the other. However, these objectives cannot be achieved unless all students are guaranteed the right learning conditions. Students do not always have sufficient learning skills for studying or completing a vocational qualification. If needed, students are given extra support in subjects such as mathematics, Finnish, information technology or foreign languages. They also receive support for developing their study skills or life management skills (MINEDU 2019a).

Tertiary Education[9]

The Finnish higher education system is divided into two sectors: **research universities** and **universities of applied sciences**. The main task of traditional universities is to pursue research and provide highest-level education in the respective fields, while universities of applied sciences, which achieved higher education status in the 1990s, offer a practical education responsive to professional needs and advance related research, development, and innovation. Finland's network of higher education institutions includes 13 university-level institutions and 23 universities of applied sciences. The universities function under the Ministry of Education and Culture, with roughly 50 percent of their financing coming directly from the national budget. The universities

[9] As the focus of this report is Basic Education, we will limit our discussion of higher education to students' transition from upper secondary education to and through tertiary education.

negotiate the quota for degrees and student intake annually with the Ministry and have significant autonomy regarding teaching, research, and student selection. Universities are to promote lifelong learning, foster interaction between the academy and the greater society, and share research results and artistic activities. Lately, one key goal has been to improve relationships and collaborative research with the international community among scientific staff and students (see, for example, the Erasmus+ program for 2021–2027).

To guarantee the freedom of science, the arts and higher education, **research universities** are independent legal entities with the right to make independent decisions on matters related to their internal administration. Even with this autonomy, however, universities collaborate in several ways, including on student selection. Study programs are organized in modules aligned with the two-level degree structure of the European Bologna Process, and course assessments are provided in the European Credit Transfer and Accumulation System. Instruction is free for all Finnish degree students and for degree students from the EU/EEA countries, with some exceptions. Master's degree programs for non-EU/EEA nationals have tuition fees. Studies at Finnish universities are very independent. Even at the bachelor's level, students are responsible for their own study plans, and have a high degree of flexibility when it comes to planning when they will take the various courses and exams that make up their degree. The Finnish general upper secondary study structure can thus be seen as direct preparation for university studies.

Universities of applied sciences are mainly multidisciplinary, regional higher education institutions oriented toward working life and regional development. They provide education and training for the workplace but also innovate, carry out applied research and development, foster the arts, promote regional development, and support the commercial and industrial structure of the region. Like research universities, universities of applied sciences are independent legal entities and make independent decisions on matters related to their internal administration. And like research universities, universities of applied sciences have significant autonomy around their educational and research program. An operating licence granted by the government is required before any party can establish and manage a university of applied science.

The two types of university differ in size and the number of available disciplines, with the largest of the research universities, the University of Helsinki, made up of 11 faculties, with over 30,000 students[10] and close to 10,000 employees. In recent years, many former field-specific universities have been consolidated into bigger units, the most well-known being the 2020 merger of Helsinki University of Technology, the Helsinki School of

[10] Note that with respect to the length of student enrollment in academic programs, Finnish higher education differs greatly from the Anglo-Saxon college and university (BA/MA) structure.

Economics, and the University of Art and Design into Aalto University. Another example is the Tampere Universities community, which was formed through the merger of Tampere University and the Tampere University of Applied Sciences.

Student Selection

The Ministry of Education initiated a reform of the student selection process in order to accelerate the progression of students from upper secondary education to tertiary degrees and entrance into the academic workforce. Even so, universities retained authority over how the results of the matriculation examination would play out in the different faculties. The reform has spared universities the tasks of creating and administering entrance examinations while preserving their autonomy in implementation. For example, a university is empowered to set its own selection quotas and number of credits awarded on the different sections of the matriculation examination.

The main driver behind the student selection reform was the slow transition of students from upper secondary education to tertiary education, reflected in the relatively high mean age of Finnish university students compared to other countries. Also of concern has been students' slow progress through their studies. While the student selection reform aims to accelerate the acceptance of new matriculates to universities, it does not help much with the real problem, which is the lack of capacity in the system. The magnitude of the problem is obvious in the number of applicants to higher education, which every year swells to more than three times the size of the age cohort finishing upper secondary education. This phenomenon, known commonly as the "matriculate logjam" (*ylioppilassuma*), is well known and has been a problem in Finnish higher education since the 1980s (Ahola 2010).

The causes of the logjam go back to the 1960s, when baby boomers entered grammar schools in huge numbers but universities did not keep pace with their student intake. The basic school reform intensified matters by increasing the share of each age cohort entering the academic track of upper secondary education. As a result, since the year 2000 some 120,000 students have been caught in Finland's matriculate logjam. Some view the situation as an unintended (and perhaps ironic) consequence of Finland's acclaimed "no-dead-end" educational principle. Ahola points out the logjam may indicate an inordinate regard for educational degrees in Finnish society, referring to what Burton Clark described as "people's excessive educational expectations in relation to the prevailing educational possibilities" (Clark 1969, 569, in Ahola 2010).

Finland made an effort to solve the logjam by establishing the universities of applied sciences in the 1990s, but as the reform mainly converted mid-level professional education to tertiary level, thus almost doubling tertiary student intake, the jam remains in place, just as finding a solution remains on the agenda of each successive government. The government has made strides over the past 10 years, including streamlining the digital tertiary

application system; creating quotas for new matriculates (later deemed unconstitutional); devising entrance examinations based more on extemporaneous critical thinking than on prior reading; and implementing reforms to reduce the number of students who change programs of study mid-degree, to name a few. But as the latest reform concerning the increased role of the matriculation examination shows, none of these steps have succeeded in solving the logjam. Some efforts may have even backfired, such as favoring applicants without a prior study place, which seems to have prevented many from accepting a place unless they are sure it is the best offer they can expect, even if a potential better offer means applying again and adding further to the logjam. It is worth noting that in its 2008 report on Finnish education, the OECD was already recommending an increase in study places in some of Finland's most popular programs (OECD 2008), a move Finland considered too expansive.

Another longtime issue regarding the goals of higher education is the slow pace at which many students advance through their studies. In Finland, five years is the nominal length of a combined bachelor's and master's program. Yet in 2019, only 21 percent of students had acquired their degree in this time; after 10 years, 34 percent of candidates still lacked a degree. Students do not proceed much faster at the universities of applied sciences, where 32 percent still lacked a degree after 10 years. The situation is more positive within fields such as medicine and education where formal qualification is mandatory for employment (Yle 2019). Universities have attempted to counter the problem with limitations on enrollment time, restrictions related to financial support, and changes in degree structures, but as the above numbers show, timely completion of studies remains a problem in Finland compared to other countries.

In a further effort to alleviate the problem of prolonged studies, the universities have recently increased flexibility in degree studies and expanded recognition of prior learning policies. Likewise, student guidance has been developed to better serve students at different phases of their studies—especially around the master's thesis, a stumbling block for many—and also career and recruitment services.

In addition to the increasing importance of the matriculation examination in student selection, the tie between general upper secondary education and higher education was strengthened with the latest law and new National Core Curriculum for upper secondary education. Guidance counselling (*oppilaanohjaus*) as a mandatory subject has always included counselling regarding further education opportunities, as well as university visits and presentations by alumni currently enrolled in tertiary education. While some upper secondary schools (especially those located close to universities) have enjoyed longstanding collaboration with universities, especially in the STEM fields, the new NCC includes mandatory modules for upper secondary that are developed in collaboration with tertiary education. In response, universities are opening some of their courses to upper secondary students so that they can be approved as part of the students' current syllabus and/or be recognized as part of their later university studies.

7

Educational Governance and Administration

In this chapter, we describe how the Finnish learning system is governed and the roles and responsibilities that various agencies play. Under the political authority of the Finnish parliament, the Ministry of Education and Culture, the Finnish National Agency for Education, and the six Regional State Administrative Agencies work closely with local authorities in the field of education.

For the most part, municipal authorities or consortia of authorities provide basic and upper secondary education. All municipalities have a statutory duty to organize education for the children living in the municipality. The actual organizer of education might be the state, a university or a private association or foundation, but the responsibility for the arrangement lies with the municipality. Local authorities are also responsible for organizing pre-primary education and deciding whether it is offered in a school, a municipal daycare center or in some other suitable institution or location. Local education authorities can also provide other types of education (e.g., liberal adult education).

Governance

A combination of national, regional and municipal governance and financing supports the Finnish learning system. The parliament decides on legislation, funding, and policies concerning the education system while the Ministry of Education and Culture oversees the planning and execution of the education policies. The Ministry outlines the general lines and strategy of education policy, oversees all education tied to the state budget, and prepares education-related legislation and governmental decisions. The Finnish National Agency for Education under the Ministry of Education and Culture is a central actor in the development of education and the execution of education policy. The Regional State Administrative Agencies promote the basic rights and legal protection of students by handling complaints and assessment rectification requests. Education providers are guided and obligated by legislative objectives and the National Core Curricula. Each municipality has at least one school board or similar institution, chosen by the municipal council.

National Governance

The parliament passes educational legislation, while the **Ministry of Education and Culture** (MINEDU) drafts legislation and government resolutions related to education at all levels and coordinates the activities under its remit. The government acts on matters related to common national objectives for education as related to the Basic Education Act, such as the division of time used for teaching the different curricular subjects and subject areas and for guidance counselling (distribution of lesson hours).

The Finnish National Agency for Education (EDUFI) is an expert agency under the remit of the Ministry of Education and Culture. The Agency is responsible for the continuous development of education, enhancing the effectiveness of education, and monitoring the provision of education. It prepares the national core curricula for each level of education (ECEC, pre-primary, basic and upper secondary), which local authorities use as the basis for local curricula. EDUFI also determines national qualification requirements for vocational education and training and for separate competence-based qualifications and evaluates learning outcomes in VET (MINEDU 2020a).

The *Strategy for Ministry of Education and Culture 2030* (MINEDU 2019b) presents both the near-term agenda and long-term strategy for the Ministry and its agencies. At the heart of the strategy is the Ministry's responsibility for securing the foundations of culture and education in society. Early childhood education and care, education, science, art, culture, sports, and youth employment all play an intrinsic role in fostering education and culture and helping to revitalize society. The strategy describes three impact-objectives and their priorities. The Ministry's goals are to enable better skills, knowledge, and competence for all, to take creative, inquiry-based and responsible action that renews society, and to ensure equal opportunities for a meaningful life.

The other bodies central in shaping education policy are as follow:

- **The Finnish Education Evaluation Center (FINEEC)** is an independent agency under the remit of the MINEDU responsible for the evaluation of education. It operates as a separate unit within the Finnish National Agency for Education. The FINEEC carries out evaluations related to education including the operations of education providers from early childhood education to higher education. The FINEEC comprises the Evaluation Council (appointed by the government), the Higher Education Evaluation Committee and four units: The General Education and Early Childhood Education Unit, the Vocational Education Unit, the Higher Education and Liberal Adult Education Unit, and Development Services Unit. The FINEEC is the body implementing assessment of learning outcomes for basic and upper secondary education (see Chapter 9). In addition, the FINEEC's duties include supporting

education providers and higher education institutions in issues related to evaluation and quality assurance.

- **National Education and Training Committees** and the **National Coordination Group for Education and Training** are expert bodies under the remit of the EDUFI to design and develop vocationally-oriented education and training.

- Key stakeholder groups regularly involved in the formation of Finnish education policy include the Association of Finnish Local and Regional Authorities, the Confederation of Finnish Industries, the Central Organisation of Finnish Trade Unions (SAK), the Finnish Confederation of Professionals (STTK), the Confederation of Unions for Professional and Managerial Staff in Finland (Akava), the Trade Union of Education in Finland (OAJ), student unions, and education providers (OECD 2013, 14).

Regional Governance

Regional State Administrative Agencies (AVI) are responsible for the regional tasks of the Ministry of Education and Culture in the field of education, day care, libraries, sports, and youth employment. The agencies' mission is to promote regional equality by carrying out executive, steering, and supervisory tasks as required by law. At the local level, these tasks are the responsibility of municipalities. The Regional State Administrative Agencies cooperate with regional **Centers for Economic Development, Transport, and the Environment** in the assessment of regional basic services and in educational tasks. The centers are also responsible for the development of vocational and adult education and for managing the funds for the European Social Fund (ESF) projects for vocational and adult education (see Regional State Administrative Agencies 2020).

The Regional State Administrative Agencies' tasks within the administrative branch of the Ministry of Education and Culture include

- assessing the accessibility of basic services, such as early childhood education;
- complaints, requests for rectification, and issuing of statements in educational services, as well as requests for rectification in student assessments; and
- in-service training for teaching staff (short-duration courses).

The Regional State Administration Agencies promote the implementation of legal protection in the field of education and culture and assesses regional and equal access to basic services.

Municipal Governance

In many respects, the autonomy of Finnish municipalities has increased since the 1990s. The status of Finnish municipalities is regulated in the Finnish Constitution (731/1999), where it is stated that regarding municipal and other regional self-government, "Finland is divided into municipalities whose administration shall be based on the self-government of their residents. Provisions on the general principles governing municipal administration and the duties of the municipalities are laid down by an Act. The municipalities have the right to levy municipal tax […]." In education administration, this means that municipalities as education providers were given more responsibilities to organize education, but the state still has a powerful tool to guide municipalities through the financing of education. Municipalities can and do use their own municipal tax money to cover extra expenditures such as creating smaller teaching groups within a class.

Education providers (for the most part municipalities or consortia of municipalities) decide on many practical issues within education. Decisions regarding basic education are made at the local level, either by the local government or by the school, depending on how decision-making is organized in the municipality. Local authorities are responsible for organizing basic education, allocating funding, designing and implementing the local curriculum, and recruiting and training school and administrative personnel. Local authorities also decide how much autonomy to give schools.

Each municipality has an elected or nominated body called the local education and culture committee, the local education committee, or similar, depending on the size and internal administrative structure of the municipality. Local education departments are responsible for planning, preparing, and implementing education initiatives as determined by the committee. Every school or educational institution has a principal or school leader who is responsible for its activities. If local authorities so decide, schools can have a board of directors that coordinates activities. Many such boards also include students' parents. Schools are expected to also have a student council, which represents students in school-related matters. The council comprises representatives from each grade level, elected by the students themselves.

Financing of Education

Since the adoption of the basic school in the 1970s, education has been free in Finland at all levels from pre-primary education at the age of six to higher education. There are no tuition fees for students except for some adult education programs and institutions (e.g., Open University). In 2018, Finland used 5.6 percent of its annual national budget for education, behind only Norway at 6.3 percent. Yet, Finland's total funding for education was only slightly above the OECD average (5.7 percent vs. 5.0 percent) with the lowest level of private funding (0.1 percent) among the OECD countries (OECD 2018). Overall, private funding accounts for just 2.6 percent of

Finnish educational expenditure, and only one percent for pre-primary, basic and general upper secondary education. At 4 percent, the share is higher for upper secondary VET and higher education (Eurydice 2020b).

The following key institutions have different roles in funding education in Finland: **The Ministry of Education and Culture** is the public authority in charge of the financial administration of state subsidies within education. The financing system applies to municipalities, private education providers and joint municipal authorities. **The Ministry of Finance** monitors and assesses the status and development of the finances of municipalities. The Ministry of Finance also develops the system of central government transfers to local government, calculates and grants central government transfers to local government, is responsible for the centralized payment of the municipality of residence reimbursements for pre-primary or basic education to the education provider, prepares discretionary increases in central government transfers to local government, and monitors and projects the development of the services and finances of municipalities on a municipal- and region-specific basis (Ministry of Finance 2020b). **The Finnish National Agency for Education** is responsible for the collection of information, the information services and customer guidance related to the government transfers system.

According to the Ministry of Finance, the national cost for higher education, research and education was 6.9 billion euros (12 percent of the total annual state budget) in 2020. This includes the cost for pre-primary, basic and upper-secondary education which was 1.03 billion euros (15 percent of the total costs of education and 1.8 percent of the annual budget) and the cost for vocational education and training which was 0.94 billion euros (13.6 percent of the total costs of education and 1.6 percent of the annual budget).

Local education providers receive central government transfers for costs related to the establishment and operation of educational institutions. The state participates in the financing of educational services by means of a national government transfer system. The government transfer covers all basic public services and is based on the municipality's population size according to a basic price set per person in each age group, enriched with supplementary transfers and other additional funding based on specific needs and conditions. The state funding is paid as a lump sum and is not earmarked. Finnish local authorities are entitled to levy taxes which they use to fulfill their obligation to provide basic services. Therefore, municipalities have full autonomy over spending provided they offer all statutory (educational) services for residents.

Residence-based municipal reimbursement to education providers is determined through the municipality's imputed costs for pre-primary, primary, and lower secondary education, calculated separately for 6-year-olds (pre-primary), 6–12-year-olds (grades 1–6) and 13–15-year-olds (grades 7–9). The Ministry of Finance decides each year on a basic sum for the municipal-specific reimbursement for each municipality separately, based on pre-determined unit prices, which account for regional (e.g., archipelago), tax related, and demographic factors. The

residence-based municipal reimbursement is considered in connection with the disbursement of the central government transfers.

Funds to cover operating costs are disbursed directly to the educational institution. Schools are expected to be autonomous and self-directed and to operate as effective economic units. The school principal is responsible for managing the school's budget. The principal is expected to have a general view of the school budget and follow up on the respective expenditures. The principal is also responsible for daily decisions regarding all spending, including teacher recruitment, allocation of students to classes or teaching groups, teachers' participation in in-service training, and buying teaching materials.

As can be seen in Table 3, the distribution of expenditures for the different educational levels has been quite stable from 2000 to 2017 (Eurydice 2020b). The reduction in financial aid for students is due to a reform, which transferred support for student housing from education to a general social housing allowance in 2017.

Table 3 Share of National Expenditure by Type of Education in 2000 and 2017

Expenditure	Year 2000	Year 2017
Pre-primary education	1%	3%
Basic education	38%	40%
General upper secondary education	7%	6%
Vocational education	13%	14%
Apprenticeship training	1%	1%
University of applied sciences education	7%	8%
University education and research	19%	19%
Other education	4%	4%
Financial aid for students	9%	6%

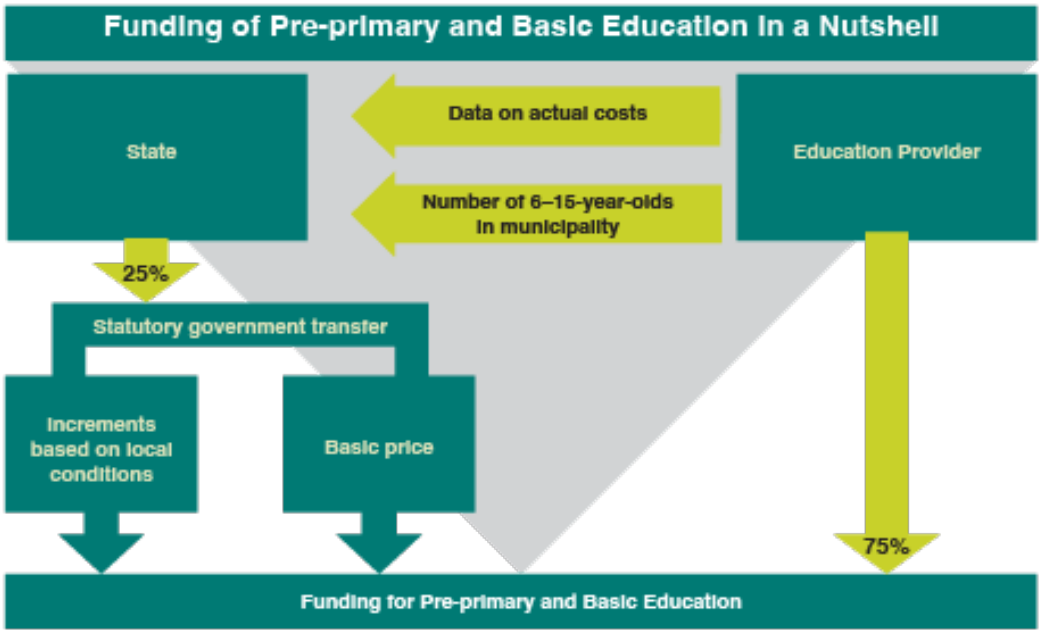
Source: Eurydice 2020b

Funding of Pre-primary and Basic Education and Other Education Services

Finnish pre-primary and basic education are all free of charge for the student, including those schools governed by private bodies (i.e., which are neither municipal nor state schools). In pre-primary and basic education, free tuition covers all learning materials, school transport if considered necessary, and a daily meal.

Municipalities are responsible for arranging educational services for people living in their area. Pre-primary and basic education are funded both by central and local authorities (see Figure 2, below). **State and local education providers** share responsibility for the operating costs and the construction of schools. Municipalities contribute most (on average 75 percent) of the funding.

Figure 2. Funding of Pre-primary and Basic Education



Source: Finnish National Agency for Education 2020

Funding for pre-primary and basic education

To equalize funding in different municipalities, certain factors increase the statutory government transfers. Municipalities with, for example, a sparse population, a high number of foreign language speakers, or a low level of parental education receive additional funding.

Unlike other forms of education in Finland, basic art education charges a fee, although most costs are covered through public funding. Likewise, liberal adult education charges a study fee, which covers a small portion of the

actual costs for which no statutory local government transfer is stipulated. Upper secondary school students can apply for financial aid for full-time art studies, and there are also various financial subsidies for adult learners. Tertiary education is free for students with student unions providing subsidized low-cost meals.

The Act on the Financing of Educational and Cultural Provision (1705/2009) has provisions for the financing of such activities in pre-primary and basic education that do not fall within the scope of the general age-group based transfers financed by the Ministry of Finance. Under the Basic Education Act (628/1998), the Ministry of Education and Culture is responsible for financing additional optional basic education. These options include preparatory instruction for immigrants, basic education for students above the age for compulsory education, education provided abroad (e.g., a Finnish basic and upper secondary school in Southern Spain), education based on extended compulsory education for students with learning difficulties, reform school education, basic school-level boarding school education, and so called flexible basic education intended for countering school dropout. Financing is determined through a unit price per student.

In addition, each year the Ministry of Education and Culture distributes funds to education providers for diverse programs and projects to develop teaching. The funds can be used, for example, to divide classes into smaller groups, hire school assistants, or offer an additional (besides English) A-level (advanced syllabus) foreign language, either German, French, Russian or Spanish. (Some municipalities may also offer this language option supported through their own financing.) In recent years, the supplementary funding system has come under criticism, as the small municipalities most likely to need the extra funding are also the most likely to lack the human resources to manage the recurring application processes. The Association of Finnish Municipalities has proposed instead that the funds should be included in the core funding for all municipalities. Seen from a governance point of view, however, the supplementary funds are an expedient instrument for guiding educational policy and a tool for the Minister of Education to highlight particular educational trends. At the school and municipal level, the problem of the supplementary funding is also that it is mostly a short-term solution. Projects and programs born of such funding very rarely bring out permanent structural changes capable of enduring after the funding period.

Funding of Secondary Education

In upper secondary schools and institutions, students are mainly responsible for their learning materials. Yet municipalities can (and often do) provide some students with laptops—a practice bound to extend to all schools with the extension of compulsory education to include upper secondary education and the transition toward a fully digital matriculation examination. It also means that learning materials will be provided free of charge. There has been some concern, however, that the municipally-funded learning materials might threaten

the autonomy of schools and teachers to choose their own materials. All health and welfare services (including dental care) are already free for all upper secondary students.

For upper secondary education, the national government allocates funds based on the number of students and a per pupil amount. In 2020, this was of 6305 euros. In general, for upper secondary education, the municipality covers teaching and education expenses for an additional amount of up to 58 percent of the amount of the national government per pupil cost.

Figure 3. Funding System for Vocational Education and Training

Source: Ministry of Education and Culture 2019a

The VET funding system rewards education providers for their outcomes, efficiency, and the effectiveness of their activities. The focus of funding is on completed units and qualifications, employment, or placement in further studies following education as well as feedback collected from students. The amount of time students spend in the education system is not relevant to the funding structure. VET is jointly financed by central and local government. The funding is based on an appropriation in the state budget. The funding is granted and paid directly to the VET providers, who decide on the use and allocation of the financing. The funding is comprised of strategic funding, core funding, performance-based funding, and effectiveness-based funding. Strategic funding is at least 4 percent of the appropriation for VET. The remaining part of the appropriation for VET is granted on the following basis: basic funding is 50 percent, performance-based funding is 35 percent and effectiveness-based funding is 15 percent (Figure 3, above). The funding is for students pursuing a VET-degree. VET-providers have separate funding for specialist vocational qualifications, further vocational qualifications, or initial vocational qualifications.

In 2020, the government's base per pupil budget for VET students was 5902 euros. This covers 70 percent of the total costs with the rest covered by special funds as determined by the funding formula.

Due to Parliament's decision of December 2020 to extend compulsory education to cover upper secondary education, the following will be free of charge for all students:

- Instruction (already free of charge)
- Daily meals (already free of charge)
- Textbooks, laptops, and other learning materials required for learning in the curricular subjects
- Tools, clothing, ingredients, and other materials required in the curricular subjects
- The five mandatory exams of the matriculation examination at the end of the general upper secondary school, including the retake of an exam that was not passed
- School commute of seven kilometers or more (to a reasonable distance)
- Accommodation (housing) and travel costs when deemed necessary (e.g., vocational education offered only in institutions that are far from where a student lives)

Students will remain personally responsible for the equipment needed in education focusing on special interests, such as musical instruments and sports equipment.

The Ministry of Education and Culture has announced funding in the General Government Fiscal Plan to cover the costs of extending compulsory education to be EUR 22 million for year 2021, EUR 65 million for year 2022, EUR 107 million for year 2023, and EUR 129 million for year 2024. The reform will affect one age group at a time, which means that the need for additional appropriations will gradually increase. The duration of upper

secondary studies is three years, meaning the need for additional appropriations will be fully met in 2024.[11] Even before the extension of compulsory education, however, many had voiced concern that the reform of student selection for university (see Chapter 9) might cause some students to prolong their studies to the allowed four years. The Association of Finnish Municipalities has also pointed out repeatedly that the Government Fiscal Plan for covering the costs of extending compulsory education is too conservative. According to Association's calculations, the annual expenditure will be at least 150 million euros per school year (Aamulehti 2020).

[11] See more https://minedu.fi/en/faq-about-the-extension-of-compulsory-education

8

Learning Outcomes and Quality Assurance Supporting Governance

One notable feature of the Finnish education system is its lack of systematic student-level assessment at the compulsory level to provide reliable data for the monitoring of learning outcomes. The lack of national testing does not mean that there is no monitoring. At the national level, monitoring is implemented by relatively frequent sample-based assessments in the two official languages and mathematics, and with less frequent assessments in other subjects. Finland also differs from most countries in its relatively weak quality assurance. Because institutional monitoring is not centralized but rather left to municipalities, national-level comparisons among institutions in quality, approach, and process are impossible. Since the elimination of the national and regional inspectorates in the 1990s, there has been no systematic external school evaluation.

The lack of systematic monitoring of learning outcomes or of the functioning of municipalities as providers of basic education is seen by some as a possible weak point of the Finnish basic and general upper secondary education system. Finnish sociologists of education see the shift from the strongly centralized and regulated culture of the early years of the basic school to the current culture of decentralization and individual choice as a paradigm shift in educational governance related to a wider Western neo-liberal turn (e.g., Varjo et al. 2016). In Finland, however, it seems that the rationale for the lack of testing and monitoring is a concern that any kind of assessment—but especially standardized testing—is seen as a threat to equality and to teacher and school autonomy.

The main institution that monitors learning outcomes is the Finnish Education Evaluation Centre (FINEEC), which operates as a separate unit within the Finnish National Agency of Education. The FINEEC is responsible for carrying out all national evaluations at all levels of education, from early childhood education to higher education. The central and most visible part of FINEEC's activities is implementing the national sample-based assessments of learning outcomes for basic education, the key results of which are reported widely, including in the daily press. Due to the sampling procedure, however, the results of the assessments do not allow for school-level monitoring. Likewise, due to the lack of adequate anchor items and the long intervals between assessments

in most subjects, the results have not provided reliable trend data except for the latest longitudinal assessments in Finnish/Swedish and mathematics. Accordingly, the assessments have only served to monitor possible trends in group-level differences (region of domicile, gender, Finnish/Swedish instruction, students' home background). In view of this, it can be said that the international comparative studies organized by the IEA and the OECD have had an especially important role for Finland, as they fill a function that is not provided internally.

Yet, even if there is no strong nation-level monitoring, there is some external evaluation. In the PISA 2015 study, a little over half (57 percent) of the participating lower secondary principals reported some external evaluation of their school. Still, this remains low compared to the international average of 75 percent. Rather than strong external evaluation, the Finnish system requires self-evaluation for education providers (OECD 2020). However, the latest FINEEC evaluation (2017) showed that many education providers are lacking even a minimally functioning self-evaluation system, much less a systematic assessment culture as part of quality assurance. It follows that the self-evaluations of many education providers do not meet the criteria of the 1998 trust-based reform of the educational administration, and calls into question whether Finland should rely on a trust-based system as a basic feature of its education management (Harjunen et al. 2017).

The OECD also noted Finland's weak national quality control in its 2013 report of the Finnish education system, commenting not only on the lack of structure for maintaining quality control but also on the lack of even a shared perspective on what constitutes quality.

Monitoring of Learning Outcomes

As stated above, a notable feature of Finnish basic education is its lack of systematic standard-based student-level assessment of learning outcomes that would provide comparable and reliable information on the development of their competences. Without international comparative studies, the Finnish education system would have data only about changes in group-level differences, but not at the actual level of achievement. The decline in Finnish students' achievement became widespread public knowledge only with the results of PISA 2012, while the exceptionally large between-class differences were revealed in secondary analyses of the Nordic results of the IEA TIMSS 2011 study (Hansen et al. 2014).

As noted, Finland does carry out some monitoring. Since 1995 (OPH, 1995/1996; Lingard et al. 2013), there has been national monitoring by first the National Board of Education (later National Agency of Education) and after 2010 by the FINEEC through sample-based assessments of learning outcomes, bi- or tri-annually in Finnish/Swedish and mathematics and less frequently in other subjects. The goal is to implement at least one assessment in every subject (academic and non-academic) during the approximately 10-year cycle of the NCC.

The long cycle limits the possibility of monitoring development, as most subject syllabi change at least somewhat within the 10-year cycles.

As the only common-to-all high-stakes exam in the Finnish education system, the matriculation examination (see Chapter 9) is the main tool for monitoring learning outcomes in (general) upper secondary education. The different subject-specific exams tie directly to the content of the respective subjects' syllabi. Due to this link, the examination measures students' proficiency in the different subjects with accuracy and high content and construct validity (Kupiainen et al. 2019). Yet, the examination does not provide a valid tool for monitoring the proficiency of the whole student population in the different subjects (except for Finnish/Swedish as mother tongue or language of instruction and A-level English exams which almost all the annual examinees take) or allow comparisons over time in student proficiency. The first of these failures is due to the wide choice students have regarding which exams to sit for (Kupiainen et al. 2016) and the second to the lack of any type of anchors in the mainly essay-type tasks of the exams, which change from year to year. Despite anecdotal evidence from teachers and censors (controllers nominated by the Matriculation Board who check the answers of every examinee) on the declining quality of student responses, hardly any research on the subject has been done. As is the case for the sample-based assessments of the FNEEC, the matriculation examination makes it possible to compare schools and rank schools across years—a long tradition in the media but not a system officially supported by the Matriculation Board. However, as the choice of upper secondary school is based on students' earlier school achievement and most exams are optional, with varying student bodies taking them annually in each school, the rankings cannot be interpreted directly as an indicator of a particular school's success.

Basic School

After Finland decentralized its educational system and dissolved the school inspection system in the 1980s and the 1990s, the municipalities assumed responsibility for monitoring the effectiveness of education. In the mid-1990s, however, Finland created a national system for sample-based curricular and thematic assessments with the particular goal of ensuring regional equity in basic education (FNBE 1995). This meant that Finland decided not to adopt a comprehensive standardized testing system. This approach is also evident in the National Core Curriculum, where goals were set for *teaching*, not student learning. With trust in the high standard of Finnish teachers and respect for their autonomy in implementing the curriculum, policymakers relied on the detailed curriculum and in-service training to ensure comparability of teachers' grading. Yet, the national assessments by the FNBE and later the FINEEC have continuously shown significant school-level variation in grading. As students' final grades are of critical importance to their options for upper secondary education, the problem of variability has been discussed widely among education researchers and even in the daily press. In a 2014-15 Ministry-led project, "The Basic School of the Future—Toward a New Rise," an expert group on assessment

recommended a return to the use of standardized tests for key school subjects to guide and calibrate teachers' grading (see Chapter 3). However, the recommendation was largely ignored by the Ministry in later discussions, maybe out of fear that it would lead to calls for a basic school exit exam.

As we have said above, the national monitoring of learning outcomes is built on the national sample-based assessments, implemented mostly at grade 9 when the assessment tasks can be aligned with the goals set in the NCC and the results will allow a view of students' proficiency at the end of what was formerly compulsory education and is now the end of common education. Only in the mid-2010s—maybe inspired by the declining results of Finnish students on international studies—did FINEEC introduce longitudinal assessments to capture not just the achievement of 9th graders but the development of their proficiency across the school years. FINEEC implemented the first follow-up study in mathematics from grade 3 to the end of upper secondary education (Metsämuuronen 2017), and in 2018 launched an even more extensive study of students' language skills in Finnish/Swedish at grade 1, with students to be followed across the whole nine years of basic education (Ukkola & Metsämuuronen 2019). Due to reasons already listed above, however, neither of the studies will offer data for the monitoring of learning outcomes over time as results cannot be compared with the results of earlier studies.

Municipalities are obliged to monitor the effectiveness of the education they provide. The most reliable way to do this would be to pay FINEEC to implement the national assessments for full coverage of the municipal age cohort. Yet most municipalities lack the resources to buy assessments for such a large group. This reality, combined with a general opposition to high stakes testing and general concern over the public ranking of schools makes the wider use of national assessments quite rare.

As a result, there is very little assessment that is not done by a student's own teacher. Little is known about how often subject teachers use the same exams in the classes they teach—information that might help calibrate grading at least within the schools. As no systematic follow-up is done regarding either the exams given or students' performance across time, there is little data about fluctuations in either, either as a function of the school or the teacher. As noted above, the school-level fluctuation in students' final grades—and in assessment more generally—has generated discussion among parents and in the daily press. As yet, maybe due to the general trust (or complacency) parents feel toward the education system, the criticism has not resulted in any changes in policy. That said, it is hard to imagine that the current reform of the NCC assessment criteria would have happened without the pressure of (parental) discontent. Ever since the early 2000s, the historically respectful relationship between school and home has begun to erode, with parents (especially more highly-educated parents) beginning to voice new expectations regarding their children's education. It is not difficult to imagine these expectations morphing into official complaints regarding assessment, especially as the threshold for admission into the most sought-after upper secondary schools is rising and the national assessment results

indicate that grading is on average stricter in schools with better-achieving students. Despite teachers' professional ability and experience, their interpretation of the criteria for grading offered in the NCC can hardly be free from some comparisons among the students they teach daily. At least this seems to be the case when looking at the results of the national assessments: while teachers' grades within a school reflect their students' performance in the assessment tasks well, there are clear differences between schools in the relative level of the grades they have given. In other words, teachers are good at putting their students on the (imagined) Gaussian or normal curve, but they do not know where on the curve their students sit among the normal curve of the students from other schools. This explains why students in schools with better-than-average mean performance are graded more strictly than those in schools with a lower mean performance. None of this, however, explains why GPAs of students admitted to the most sought-after upper secondary schools in Helsinki have been rising rapidly, as there is little reason to think that students' attainment levels have been rising to the same extent.

One persistent problem with monitoring Finnish learning outcomes is the lack of a clear standard differentiating between a score of 5 (adequate proficiency) and a score of 4 (fail) in the 4-10 scale. Many consider the creation of clear requirements for a score of 5 to be the most important aspect of the new NCC criteria adopted in 2022. On the other hand, many also fear that the new criteria will lead to an (unwarranted) increase in the share of students receiving a score of 4 (fail). The new policy regarding proficiency might not have much impact of this sort, however, as students heading for failure (a score of 4) are likely to receive special support via a personalized learning plan (see Chapter 11) which means they do not use standard NCC assessment criteria. Overall, it may be reflective of the Finnish basic school's ethos of "no (open) failure." Despite the emphasis on support for weak students and relatively wide screening for learning problems (see Chapter 11) there has been no clear definition of proficiency or adequate performance of skills.

In addition to setting criteria for the "adequately proficient" score of 5, rewriting the NCC grading criteria will also add criteria for other grades on the scoring scale—the need for a finer differentiation than "good" for a score of 8 having been identified long ago, with the original criteria for a score of 8 in NCC 2004 leading to 8 as the new "normal," which caused grade inflation. Nevertheless, as the criteria are still just written descriptions, there is no guarantee that the new criteria will provide accurate enough guidelines for grading and monitoring even the share of students who do not pass the basic school with adequate knowledge and skills.

The difficulty in forming written criteria descriptions can be seen in the few examples from the NCC 2014 presented in Table 4 on the next page. The different subjects have 7–14 goals, each of which has a criterion, but we have chosen for the table examples for just some goals for some of the subjects to show how differently the idea of a written criterion can be met in different subjects. The criteria also show how hard it can be for teachers to reach grading compatible with the criteria. Moreover, the teacher is to balance between the different goals

and criteria with instructions to not just calculate a mean or rely on the lowest but to let stronger competence within one goal compensate for weaker competence in another.

Table 4 Examples of the Objectives for Teaching and the Assessment Criteria for a Score of "8" (Good)

FINNISH (MOTHER TONGUE) Objectives within sub-fields	Criteria for good performance (score 8)
Acting in interactive situations	
O1 to guide the pupil in developing his or her competence in a goal-oriented, motivated, ethical, and constructive way of acting in different communication environments	The pupil knows how to act to achieve his or her goals in diverse communication environments and situations, indicates that he or she understands the contributions of others and is able to observe the impacts of his or her communication on others.
O2 to encourage the pupil to diversify his or her group communication skills and develop skills in justifying his or her views and linguistic and communication choices	The pupil is able to express his or her opinion and give convincing arguments for it. The pupil takes the views of others into account and cooperates with them in interactive situations.
Interpreting text	
O5 To guide the pupil in developing strategies and metacognitive skills needed in understanding, comprehending, and analyzing texts and in learning to assess his or her development needs in reading	The pupil is able to use text comprehension strategies independently. The pupil is able to assess his or her own reading skills and identify development needs.
O6 To offer the pupil versatile opportunities for selecting, using, interpreting, and evaluating diverse fictional, non-fiction and media texts	With guidance, the pupil is able to use and interpret diverse texts of varying styles and also texts that are new to him or her.
Producing texts	
O10 To encourage the pupil to express his or her thoughts by writing and producing diverse texts and to help the pupil recognize his or her strengths and development needs as a producer of text	With guidance, the pupil produces also new kinds of texts and experiments with different approaches to text production and with expressing his or her views. The pupil is able to describe himself or herself as a producer of texts.
O11 To offer the pupil opportunities for producing narrative, descriptive, instructive, and most importantly, argumentative and reflective texts, also in multimedia environments, and to help the pupil choose ways of expression appropriate to each text genre and situation	With guidance, the pupil is able to produce narrative, descriptive, instructive, and most importantly, reflective and argumentative texts and use modes of expression characteristic of them.

Understanding language, literature, and culture

O15 To guide the pupil to advance his or her language awareness and become interested in language phenomena as well as to help the pupil recognize linguistic structures, different registers, tones, and stylistic characteristics and to understand the significances and consequences of linguistic choices	The pupil is able to describe the linguistic and textual features of texts, consider their meanings, and describe differences between various registers and styles.
O16 To encourage the pupil to expand his or her perception of literature and culture, familiarize him or herself with literary history, modern literature, and different literary genres as well as to help the pupil consider the meaning of literature and culture in his or her own life and provide him or her with opportunities for gathering and sharing reading and other cultural experiences	The pupil is familiar with and understands cultural diversity and is able to describe his or her own cultural experiences. The pupil is familiar with periods of literature and the roots of the Finnish culture. The pupil is familiar with the main literary genres and reads the agreed books.

MATHEMATICS

Objectives within sub-fields	Criteria for good performance (score 8)
Significance, values, and attitudes	
O1 To strengthen the pupil's motivation, positive self-image, and confidence as a learner of mathematics	Does not affect grade formulation. The pupils are guided in reflecting on their experiences as a part of self-assessment.
O2 To encourage the pupil to take responsibility for learning mathematics both independently and together with others	The pupil takes responsibility for his or her learning and participates in group activities constructively.
Working skills	
O3 To guide the pupil to perceive and understand connections between the things he or she has learned	The pupil detects and explains connections between the things he or she has learned.
O4 To encourage the pupil to develop his or her verbal and written mathematical expression	The pupil is able to express his or her mathematical thinking both verbally and in writing.

Conceptual objectives and objectives specific to the field of knowledge	
O10 To guide the pupil to strengthen his or her reasoning and mental arithmetic skills and to encourage the pupil to use his or her arithmetic skills in different situations	The pupil uses reasoning and mental arithmetic skills actively in different situations.
O11 To guide the pupil to develop his or her ability to calculate basic arithmetic operations using rational numbers	The pupil is able to perform basic arithmetic operations with rational numbers.
O12 To support the pupil in expanding his or her understanding of the concept of numbers to real numbers	The pupil recognizes real numbers and is able to describe their properties.
O13 To support the pupil in expanding his or her understanding of percentage calculation	The pupil is able to describe the use of the concept of percentages. The pupil is able to calculate percentages, the amount a percentage expresses of a whole, and the percentage of change and comparison. The pupil is able to use his or her knowledge in different situations.
O14 To guide the pupil to understand the concept of the unknown and to develop his or her skills in solving equations	The pupil is able to solve a first-degree equation symbolically. The pupil is able to solve an incomplete quadratic equation, for example by reasoning or symbolically.
O15 To guide the pupil to understand the concept of the variable and to acquaint him or her with the concept of the function. To guide the pupil to practice interpreting and producing the graph of a function	The pupil understands the concept of the variable and the function and is able to draw a graph for a first-degree and a second-degree function. The pupil is able to interpret graphs diversely.

Source: National Core Curriculum, 2014

The matriculation examination uses a two-level grading system where both normative and criterion-referenced grading come into play. The border between fail and proficient has not been based on actual content-related criteria but on a purely normative distribution of grades set on top of the initial criterion-based assessment. A portion of examinees (approximately 5 percent) have failed each exam due to the Gaussian distribution of grades (see Chapter 10). As we explained in Chapter 3, there was a period in basic education when teachers were instructed to grade their students on a curve, a process that resembled the one used in the matriculation examination. The only difference was that there was no statute to fail a given percentage of students like there is in the matriculation examination.

International Assessments and Trends

With a lack of national trend data, the international comparative studies of the IEA and the OECD (TIMSS and PIRLS vs. PISA, respectively) in which Finland has participated have provided valuable information about the success of the system. However, the relatively weak connection between the PISA test material and the Finnish 9th grade syllabi of the three tested domains, combined with the test's low stakes at both the individual student and school levels, calls into question the value of PISA trend data in monitoring the development of Finnish students' curricular achievement. The curriculum-aligned IEA-studies would offer a better tool for curricular monitoring, but Finland did not participate in them from the late 1990s to 2011 and even in 2015 only participated at the 4th grade level. Even so, it is mainly thanks to these comparative studies that the trend of declining student attainment became generally known in Finland (see also Chapter 9).

Clear indications of this decline were seen earlier in national assessments. The first instance was an assessment of students' transversal skills in one of the metropolitan municipalities in 2010 (Kupiainen et al. 2011) but the decline was confirmed in a national assessment in 2012, indicating a decline of a magnitude of over 40 "PISA points" between 2001 and 2012 (Hautamäki et al. 2013). Likewise, the results of the FINEEC's 9th grade mathematics assessment in 2012 showed that compared to the previous assessments, students' competence had declined in all measured sub-fields of mathematics: algebra, functions, geometry, numbers and calculation, probability, and statistics (Mattila & Rautopuro 2013). Maybe due to the weak comparability of the data with a very limited number of anchor items, or the still relatively strong hype around Finnish students' success in PISA, the declining results seemed not to raise much discussion or concern. The FINEEC results mainly concerned those who had doubted PISA's validity from the beginning (Astala et al. 2005; Kupiainen & Pehkonen 2008). The declining results were additionally shown in the TIMSS 2011 study, even if the title of the report (*Looking for Student-Centered Pedagogy*) did not highlight students' declining competence but merely called for a pedagogical change (Kupari et al. 2012).

Overall, as the above shows, signs of the coming decline were there for everyone interested to see. Maybe what was missing was a readiness to question the reasons given for Finnish students' success in the first three cycles of the PISA studies. Another reason might be Finland's non-participation in the IEA TIMSS studies between 1999 and 2011, meaning that Finnish students' relatively weaker performance in the curricular tasks of TIMSS 2011 (as compared to the more general mathematical literacy of PISA) might have been a surprise to many who subscribed to the excellence of the Finnish basic school.

Upper Secondary Education and the Matriculation Examination

The Law on Matriculation Examination (502/2019) defines one task of the examination as providing feedback to schools on their success in implementing the goals of the national core curriculum. However, with no anchor tasks or uniform grading to establish the rank of individual students across years, the examination does not offer a base for deciphering possible trends in students' attainment. As the procedures for preparing the tasks in each subject and each cycle are strict and very centralized under the Matriculation Board, this has not been perceived as a problem. Additionally, as the high-stakes nature of the examination relates mainly to its use in student admission to tertiary education, the use of the examination as a monitoring tool has until today been mainly discussed within mathematics, where students' declining competence has been a constant concern. Also, because the exam consists of mainly open questions designed for essay-type answers, any comparison of student responses across years is a task that could only be undertaken by academic researchers. However, the digitalization of the examination between 2016 and 2019 has opened new possibilities for comparisons over years regarding the quality and level of students' competence regardless of the changing questions.

Even for schools, the reality of changes in students' actual attainment level over time is hard to grasp as these changes can be obscured by the choice of individual exams by subject (see Chapter 9). Except for the mandatory Finnish/Swedish exam, a student's grade on any one exam is bound to reflect individual ability and interest in that particular subject (Kupiainen et al. 2016). Despite these shortcomings, the media publishes yearly the results of the matriculation examination for all schools, lately even including the lowest or mean GPA of students when they entered upper secondary education, thus allowing the public—and prospective new upper secondary students—to rank schools according to the prospective student body.

Learning Outcomes and Quality Assurance in Governance of Education

As we've discussed, Finland abolished its national and regional school inspectorate in the mid-1990s as part of a general dismantling of its strong central governance of education. Today, quality assurance is the responsibility of education providers and institutions at all levels of education. The sample-based and thematic evaluations by the FINEEC form the basis of the national evaluation started in 1998 and are a part of the quality assurance system. The reports are published on the Internet and participating schools receive their individual results, as is done with PISA. The main objective of these assessments and other evaluations implemented by the FINEEC is to monitor and steer the development of education and to support learning. The assessments and evaluations form the core of the quality assurance processes for education and provide data and information for evidence-based planning, policy decisions and performance-based steering both locally, regionally, and nationally. The information gathered in the evaluations is also used for international reviews by the Ministry of Education and Culture. The national evaluations and assessments focus on learning outcomes, the production of indicators, and

thematic evaluation projects such as reviews of education as a whole or thematic reviews.[12] The key goals are to produce knowledge for development and decision-making, to ensure educational equity and the quality of instruction, and to function as tools for steering and development in schools.

The FINEEC assessments of learning outcomes provide data on whether the objectives of the national core curricula for basic education are achieved. The results provide secondary data on, for example, school-level student assessment in relation to the learning objectives and evaluation criteria, on regional and gender differences as well as on students' motivation and attitudes regarding the assessed subject. As with PISA, the sampling does not allow school or municipal-level generalizations of the results, but the national reports can indicate the state of affairs for that specific subject. Thematic and system-level evaluations are executed to provide information about key content-areas regarding education policy and the education system, or specific areas or issues within these. The Ministry of Education and Culture makes decisions regarding directions and financing of national evaluations, and the FINEEC draws up an action plan for external educational evaluation in accordance with the Ministry's guidelines and financial resources (Eurydice 2019).

The primary focus of the national assessment of learning outcomes is on educational equity—which we define as determining whether students have attained the same level of knowledge, skills, and abilities regardless of gender, home background or domicile. The main background variables for evaluating educational equity in the reports are region, language of education, gender, and social class, commonly indicated by mother's level of education. In addition to equality, the assessments also examine the availability of education, which refers to students' equal opportunities to continue their studies after basic education. Educational equality can be considered as having been achieved if no systematic differences are detected regarding the criteria under examination (Jakku-Sihvonen 2013).

Today, the FINEEC operates as a separate unit within the Finnish National Agency for Education. This has raised questions concerning its sovereignty, especially as the assessment of learning outcomes was originally transferred from the FNBE to FINEEC in 2014 after a political controversy arose regarding the potential conflict of interest in having the same body responsible for the NCC and the evaluation of its outcomes (cf., the tripartite system of power). The same criticism has been raised regarding the later transfer in 2019 of the Matriculation

[12] The system-level evaluations cover a wide range of topics, such as the state of the education system, the educational paths of immigrant-background students, the effect of the COVID-19 pandemic on the realization of equality and equity, the state of guidance counselling, and the paths students take from basic school to upper secondary education, to name just some of the topics of the 2020 evaluation reports.

Examination Board (until then an independent body directly under the Ministry of Education and Culture) to a separate unit within the National Agency for Education.

Monitoring with Outside Help and through Self-Assessment

Education and training providers have a statutory duty to evaluate their own activities and participate in external evaluations, including providers of basic, general upper secondary, vocational upper secondary, basic education in the arts, vocational adult education, and liberal adult education. The statutory duty likely explains the willingness of Finnish schools to participate in PISA. External evaluations or assessments other than the mostly sample-based assessments of the FINEEC may be provided by or executed in collaboration with universities or other research institutions. The FINEEC also offers fee-based assessments to municipalities and schools which are not captured by the sample and/or which wish to include students who would not otherwise be sampled, in order to capture a valid picture of students' performance at the school-level. However, the only FINEEC-assessments administered with any regularity are Finnish/Swedish, mathematics and English, with most other subjects assessed only once during each ten-year curriculum cycle.

The results of the national and international assessment of learning outcomes and other FINEEC evaluations are publicized, presented to the participating schools, and discussed in daily papers. The provider-level assessments and evaluations focus on educational objectives of the municipality, based on national objectives. They can be developed by the municipality itself or they can be bought from commercial providers or universities. There is no systematic procedure for sharing the results of the education provider-level evaluations.

External assessment by the national administration is used to measure and compare the level of quality achieved. In Finland, schools and other educational institutions often choose self-assessment to fulfill the requirement of internal assessment. When the notion of quality control was introduced to Finnish basic education, many of the bigger municipalities extended to education the quality control systems they were already using in other sectors. The most common was the Common Assessment Framework (CAF) developed by the European Union and supported in Finland by the Ministry of Finances. To help the smaller municipalities with fewer resources, in 2010 the Ministry of Education and Culture launched its own version of CAF (the Quality Criteria) built especially for basic schools (MINEDU 2012). The criteria were meant as a support tool and were intended to be optional. The Centre for Educational Assessment at the University of Helsinki also built an assessment tool based on the criteria to help schools and municipalities in their quality monitoring (Hilasvuori et al. 2012). However, despite the active discussion regarding quality work at the time (all schools were expected to name a working group to lead the effort), interest in measuring work against these criteria faded quickly. Perhaps this reflected the challenge for administrators and educational institutions in designing or choosing a system to meet their statutory assessment obligations. Because there was such low uptake of quality control and self-assessment in Finland's

education system, it is not possible to compare either the quality of education in general or the quality of teaching in particular at different schools or vocational institutions. A good example of the confusion around quality is the City of Helsinki, where schools range from the nation's weakest to strongest. As most of the differences in performance can be explained by students' background and there is no formal licensing or screening of teachers outside of the required university degree, it is difficult to say how important the different factors measured by the Quality Criteria might be in explaining these differences. However, the rising interest in the role of the school principal (see Chapter 12) may represent a new phase in the discussion of quality control.

While education providers and schools are required to have a plan for evaluation and development, they are free to determine the objectives of the evaluations. There are no national directives regarding the methods of internal evaluation and, maybe reflecting this, in 2017 the FINEEC found education providers' quality control and self-evaluation practices to vary greatly and to be on average only at the emerging level (Harjunen et al. 2017). Education providers may use their own evaluation procedures or commission external evaluations, although this practice is uncommon in general education. One exception is the use of "learning to learn" assessments in metropolitan municipalities where the decline of students' competence and school engagement were first recorded and reported (Kupiainen et al. 2011). The use of external evaluators is slightly more common in vocational education.

As we mentioned above, education providers can also choose to purchase the FINEEC's subject-specific assessments of learning outcomes even if their school or students are not captured by the sample. However, maybe due to concern for publicity and ranking lists, there is no evidence of the practice. Even if the adoption of systematic evaluation and quality control has been slow, a growing share of education providers today do have some system of evaluation to underpin their work. The administrative and teaching personnel of the individual schools generally take part in the development of appropriate evaluation systems and in the evaluation itself. In vocational education and training, the importance of the encounter between the student and working life is emphasized. In general education, the most common methods are different types of surveys, assessments of learning outcomes (often in a combination of external evaluation and student assessment), various school-level plans (work, action, financial) and the evaluation of their fulfilment, financial statements, and annual reports. Both in general and vocational education, the main topics for evaluation are teaching arrangements, human resources, and leadership culture. Effectiveness is mainly discussed in relation to learning outcomes, whereas fiscal responsibility concerns how effectively educational resources are allocated. The results of the evaluations are reported back to the administrative and teaching staffs of the schools and the local bodies in charge of education. For the FINEEC assessment and evaluation, the schools get their own results and comparative information on the national average—a practice that might not always be warranted due to the sampling. In

possible municipal evaluations, it is for the municipality to decide to what extent the results will be made public, even to the participating schools.

The FINEEC evaluation of 2017 showed that providers' qualitative evaluations were most likely to fall short of the criteria and expectations of trust required by the 1998 reform of educational administration (Harjunen et al. 2017). The report listed good practices picked up from the gathered quantitative and qualitative data and made both national and local recommendations.

9

The Basic School Curriculum

The backbone of quality and equality in Finnish education is and has always been the NCC, as a centrally developed document that guides all teaching and school leadership. Local curricula still form the core of annual school planning.

The Finnish national curriculum combines two different theoretical approaches. The German *Lehrplan* tradition, inherited by the Finnish basic school from the earlier grammar schools, emphasizes the content of teaching. The newer (at least in Finland) Anglo-Saxon *curriculum* approach underlines the importance of learning objectives and teacher understanding of the learning process (Virta 2000; Salmio 2004; Krokfors 2017). The transition from the *Lehrplan*-tradition to the *curriculum*-approach is apparent in changes to the national core curricula (NCC), particularly over the last three decades. Between the NCC 1985 and NCC 2004, this development can be easily seen in the transition from specific curricular content to broader learning objectives for both basic and general upper secondary education.

From a historical perspective, the essence of the Finnish curriculum can thus be traced to two very different didactic schools, much like in the other Nordic countries and even in Germany, the "home" of the *Lehrplan*. Heavily embedded in the German tradition, the Finnish curriculum owes much to the German Herbart approach, which was introduced into Finnish discussion in the early 1930s. The Herbart school focused on content as the center of teaching and learning, leading to a strictly subject-based approach to education. After WW II, North American pedagogical trends spread to Finland and the rest of Europe. Dewey's concept of curriculum, which was introduced into the Finnish educational literature in the early 1960s, stated that curriculum should be organized around broader and more child-centered goals. Subject matter could not be at the center when organizing learning experiences of younger children (Vitikka et al. 2012).

The new curricular thinking coincided well with the need to reform the content of the curriculum of the new basic school, inspiring wide discussion of the content of education on the one hand, and of the social meaning of schooling, on the other. Learning replaced teaching and content as the new focal point of education. This relates also to the criteria for learning in the NCC 2014 being based on goals for teaching instead of content to be

taught—a shift that also seems to have caused problems for teachers due to the criteria's often quite general formulations. This has meant in practice that in addition to subject specific goals, wider goals were introduced in the curriculum as learning outcomes. Still today, this dual structure is the basis of Finnish curriculum design (Vitikka et al. 2012).

As an educational steering document, the Finnish curriculum has three main functions (Vitikka et al. 2012):

1. As an administrative document that is
   Part of the national steering system of education
   Part of international co-operation and development
2. As an intellectual document that
   Defines and recreates knowledge that is culturally significant
   Reveals current conceptions of knowledge
3. As a pedagogical document that is
   A tool for teachers
   Provides pedagogical advice and support
   Sets guidelines for teaching and learning

The current curriculum system in Finland is based on three principles:

1. Management by goals set in legislation and in the national core curriculum,
2. Autonomy of municipal authorities in providing and organizing education using a local curriculum as a steering document at the local level, and
3. Teachers as valued experts who develop the school-based curriculum as a source for different approaches to schoolwork

Source: The Finnish National Board of Education 2011

As an administrative document, the curriculum has a strong judicial remit in Finland. The founding of the Finnish comprehensive school in the 1970s was based on the idea of equality: All Finnish individuals are entitled to the same quality basic education, regardless of where they live (Lampinen, 1998; Somerkivi, 1982). This principle has guided school development ever since.

The National Core Curriculum has two parts. It first describes the mission, values, and structure of education as well as the conception of learning and goals for developing the learning environment, school culture and working methods. It then presents the objectives and core content of teaching for all school subjects (The Finnish National Board of Education 2011). This gives the core curriculum a dual role: on one hand, it is an administrative

steering document, but on the other, it is a practical tool for teachers to develop their own pedagogical praxis. This dual role makes the design and development of the curriculum structure challenging (Vitikka et al. 2012).

The Development of the Basic School Core Curriculum Since the 1970s

In Finland, the National Core Curriculum (NCC) has been updated approximately every 10 years since the adoption of the basic school (1985, 1994, 2004, and 2014) with only some field-specific changes in between (renewed sections on special education in 2011 and on assessment in 2021). The concept of a national core curriculum is, however, relatively new, introduced only with the school reform of the 1970s. Finland published its first national curriculum in 1970 and it was a strongly centralized and detailed document of close to 500 pages. Finland reformed the curriculum in 1985 after passage of the 1983 Basic Education Act, with a new emphasis on decentralization and increased teacher autonomy. The 1985 curriculum discontinued the mathematics and English streaming included in the 1970 curriculum, which was seen as a vestige of the earlier tracked education system. With the end of tracking, which had prevented students on the lower track from applying to general upper secondary education, the basic school finally became fully comprehensive, with all students following the same curriculum. Additionally, the 1985 reforms gave municipalities more decision-making power and made the needs of individual students a new key focus of basic education.

The decentralization process continued during the 1990s, with increased responsibility for basic education given to municipalities and schools, including considerable latitude to build their own local curricula as part of the curriculum reform of 1994 which pared down the NCC to a mere 100 pages. Prior to 1994, all textbooks had been submitted to central inspection, and state or regional inspectors regularly visited schools. The 1994 NCC abolished these practices. As primary education providers, municipalities were given the right to freely determine how to use financial resources provided by the state. Thus, local authorities received practically full autonomy to organize the basic schools, the education process and funding. Additionally, contrary to the 1985 NCC, school-based decision-making became a central part of formulating the curriculum (see Chapter 3).

In 1998, a new education law replaced the 1983 one, which was written soon after the new basic school had been fully adopted across the country. The new legislation focused on goals for the system, and spelled out students' rights and duties (MINEDU 2010). It also put in place thematic reviews and national assessment of learning outcomes, following the proposals in the 1995 Assessment Strategy. These new assessment requirements did not mean comprehensive, nation-wide testing of every student but rather school- and student-level sampling with the objective of obtaining a basic knowledge of learning outcomes in key subjects at the national level.

Perhaps reflecting new educational ideas or as a response to the disappointing outcomes of the first national assessments (which showed a decline in achievement compared to the few earlier international assessments

coupled with larger than expected between-school and regional differences), the 2004 curriculum reform veered back toward a more centralized NCC (see Chapter 3). An international assessment in the mid-1990s, commissioned by the National Board of Education from a group of British scholars, described education in Finnish Basic Schools as very traditional, teacher-centered and strictly subject-bound (Norris et al. 1996). The report was a clear disappointment to the FNBE which apparently had expected decentralization and new curricular freedom to have changed teaching almost overnight. Instead, maybe reflecting the slowness of actual changes in schools, the situation appeared to be very much the same in an ethnographical study of three Helsinki-area schools in 2014 (Simola 2015). Of course, an explanation might be that the sampling of the schools based on "reaching higher-than-expected learning outcomes in view of the student body" led the researchers to schools that support students' learning with "more traditional" learning methods. However, reflecting the concern raised by the national assessments, the new NCC was written to be more openly normative, emphasizing national decision-making to provide more consistency in how the NCC was implemented. For the first time, the NCC 2004 provided national criteria for student assessment, even if only with a description for good performance (grade 8 in the Finnish grading of 4 = fail to 10 = excellent) for each of the (quite numerous) subject-specific goals of the curriculum (see Chapter 7). As discussed above, these criteria were revised for the NCC 2014 and were replaced in 2021 by the new set of criteria written also for grades 5, 7, and 9 in addition to 8.

Not everyone was happy with the NCC 2004. It was seen by many as a move back to the 1985 curriculum, which had represented the more centralized governance of education before the legislative changes of the 1990s and the more liberal NCC 1994 (Rokka 2011). Moreover, preparations for the next NCC (2014) began in a very different educational context than had been the case for the NCC 2004. Now the discussion was focused on the full range of skills deemed necessary for future citizens, including those promoted by the OECD PISA. Moreover, the surprising success of Finnish students on the Mathematics and Science components of PISA 2003 and 2006 (Finnish students had excelled in reading in the IEA studies previously) altered the public view of the basic school, which had been at the time criticized for having replaced high standards with a principle of "reducing to the lowest common denominator" or "cutting the highest tops" (*tasapäistäminen*). Now the discussion focused on wider educational aims and pedagogical approaches. The challenge of a contemporary curriculum was in maintaining its alignment with evolving conceptions of knowledge and learning. Accordingly, the 2004 curriculum was seen to need restructuring to reflect and support the learning process of 21st century learners. This required the introduction and better implementation of interdisciplinary pedagogy and a conscious fostering of higher order cognitive skills in the curriculum (Vitikka et al. 2012, see also Chapter 8).

The Structure and Content of the NCC

The National Core Curriculum encompasses the mission, values, and structure of education as well as the objectives and core contents of teaching for all school subjects. The NCC further describes the shared conception of learning and the goals for developing the learning environment, school culture and working methods (Vitikka et al. 2012). As such, it can be seen as a concise framework around which the Finnish basic education and the local curricula are designed.

The NCC is written to conform with the Basic or Upper Secondary Education Act and Decree, and to Government Decrees that specify the goals of education and the distribution of lesson hours. The core curricula are national regulations issued by the Finnish National Board of Education, in compliance with which the local curricula are to be prepared. The purpose of the core curriculum is to support and steer the provision of education and schoolwork (NCC 2014, 8).

General (basic and upper secondary) education is understood as a continuous progression, where the goals and contents interlink to form the basis of instruction and the school culture (NCC 2014; NCC 2019). For this reason, the core curriculum contains not only regulations applicable to its goals and contents but also descriptions elucidating them. Where necessary, the core curriculum contains references to the legislation that underpins the norms laid down in the document (NCC 2014, 8).

The most recent curricula of pre-primary education (2015), basic education (2014) and general upper secondary education (2019) include some new features (see Chapter 10). The first and perhaps most important among them are the so-called transversal competences (*laaja-alainen osaaminen*, literal translation "wide/broad-range competence"). The core curricula describe, respectively, five transversal competence areas for pre-primary education, seven for basic education and six for upper secondary schools with slightly changing formulations and emphasis depending on the age of students for whom they are intended. These describe the more general objectives of education and reflect the competences understood to be needed in all spheres of life. Competence is further understood to comprise knowledge, skills, values and will. The transversal competences for basic education are 1) Thinking and learning-to-learn 2) Cultural competence, interaction and self-expression, 3) Taking care of oneself and managing daily life, 4) Multiliteracy, 5) ICT competence, 6) Working life competence and entrepreneurship, and 7) Participation, involvement and building a sustainable future.

We cannot discuss the NCC without bringing up the steering system behind it. In Finland, the NCC is emphatically an educational tool shaped by decision-making at various administrative levels. The curriculum functions as part of Finland's educational steering system but it also carries a critical pedagogical function in the classroom.

The NCC defines the objectives for the learning environment as well as the principles for student guidance, support, differentiation, and assessment. The NCC for Basic Education is divided into two parts: The general part and a subject-specific part. The general part includes the following themes: mission and general goals of basic education, operating culture of basic education, organization of schoolwork aiming to promote learning and wellbeing, assessment, support in learning and school attendance, and student welfare. Additional issues included in the general part are special questions of culture and language, bilingual education, basic education based on a particular philosophical or pedagogical system, and optional studies in basic education. The subject-specific part includes the guidelines for transversal competence and the objectives, content, and assessment guidelines for each subject presented as divided for grade levels 1–2, 3–6 and 7 –9, including issues subject to local decisions.

The approach for organizing teaching and learning in the NCC 2014 is (still) clearly subject-based, which means that general aims, content, and assessment criteria are defined separately for each school subject taught at the respective grade levels. The curriculum is discipline-based but also broad in nature, apparent in the 18 different subjects. The continual increase in subjects (e.g., Rantala & Ouakrim-Soivio 2020), a problem apparently not limited to Finland, has led to criticism of the curriculum as too information-oriented and fragmented despite the clear shift toward competence-based thinking on the NCC 2014 as compared to the NCC 2004 (Sulonen et al. 2010).

In addition to a new emphasis on competence, including the more prominent role of transversal competence, the "true" innovation of the NCC 2014 was the introduction of "multidisciplinary learning modules" or "phenomenon-based learning" (see Chapter 10). Multidisciplinary learning modules provide a structured way to integrate learning and increase the dialogue between different subjects whether they are taught by the same teacher or by different teachers. As such, they help transform the "project work" common in schools across the globe into a formal part of the curriculum. The NCC 2014 required all schools to make at least one such module available to all students at least once every school year. The modules should integrate at least two subjects and planning must involve students. Apart from these conditions, the municipalities and schools have full freedom to design and implement the modules as they see fit (NCC 2014, 31–32, see also Chapter 11).

The Curriculum Reform Process

The Finnish curriculum reform process, repeated approximately every 10 years, can be seen as a well-orchestrated product of the educational steering system. When the NCC finally reaches local authorities, it has gone through several levels of administrative work. The process is democratically structured and hierarchical but does not involve just administrators and other civil servants. While the early NCCs were still mainly developed by experts from the FNBE and the universities, from the NCC 1994 on, writing the NCCs has been a truly

cooperative effort involving a broad network of administrators, unions, education providers and schools. For example, the NCC 2014 used both a formal comment request process involving a wide range of organizations and stakeholders and an open Internet platform for individual comments, and incorporated views from both into the revision process (Halinen & Matthes 2018; Tikkanen et al. 2020).

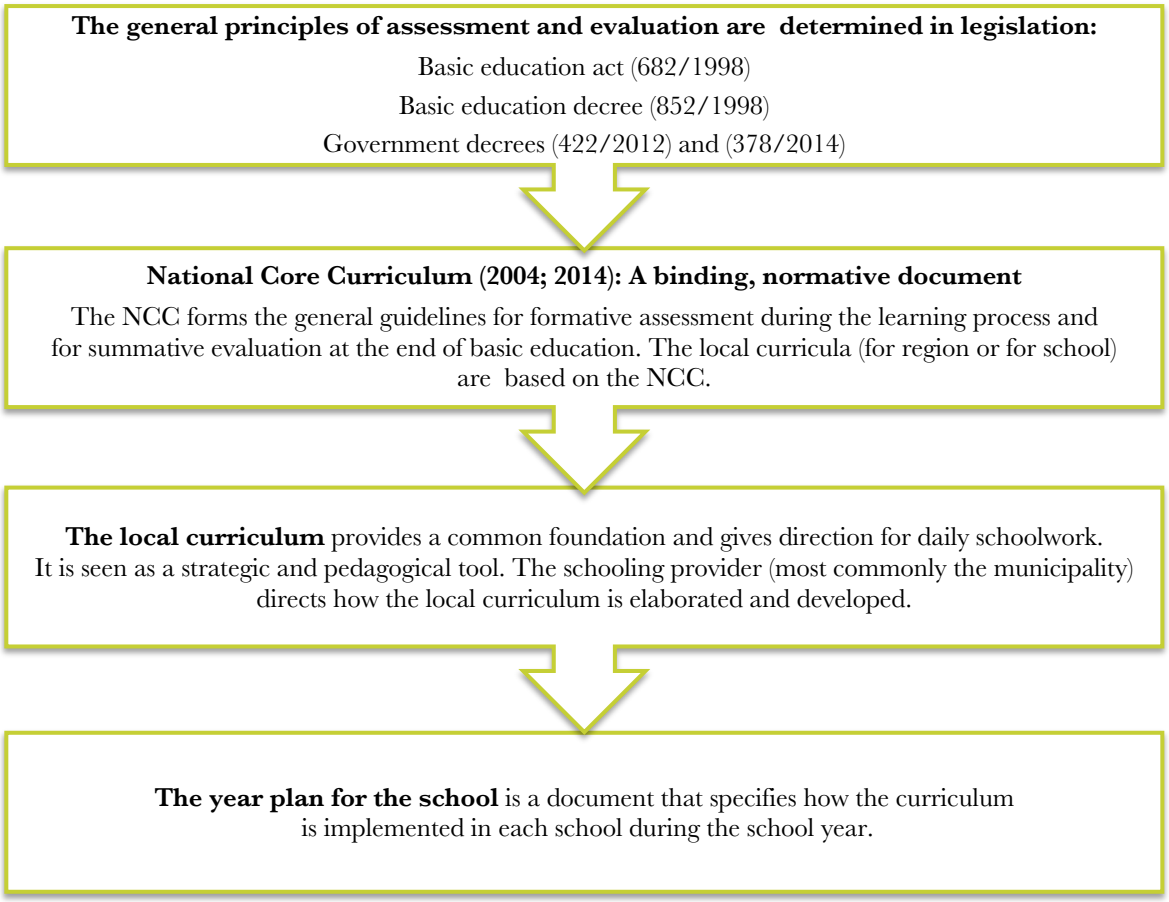
Collaboration between the National Agency and education providers has been a key factor in building the latter's sense of ownership in the curriculum development process. This consensus approach is largely viewed as successful in Finland, even if the EDUFI's willingness to listen to teachers' comments has been lately questioned (e.g., Säily et al. 2020). During the close to fifty years of comprehensive education, Finland has succeeded in building a well-functioning practice and a strong working tradition of reforming curricula, visible throughout the curriculum process. The development of structures for collaboration has been a central element of this for several decades (Vitikka et al. 2012). The Finnish National Agency of Education leads curriculum work at the national level in an open process involving all relevant stakeholders, including, among others, The Trade Union of Education in Finland, Association of Finnish Municipalities, Finnish Education Employers, Parents' Association, Finnish Principals' Association, Confederation of Finnish Industries, Publishers' Association, and several pedagogical associations. The drafts are regularly opened for public comment on the Internet.

The development of the national curriculum through collaboration between national and local authorities is a deeply ingrained practice in Finland. This has led to a shift in the focus of curriculum development toward its structure and pedagogical functionality. In the past, curriculum design was based more prominently on the work of subject specialist groups, which may be in part responsible for the curriculum's lack of a unified approach to teaching and learning. The latest NCC's focus on transversal skills and an integrated approach to teaching may be seen as a response to that fragmentation (Vitikka et al. 2012).

Basic education, upper-secondary education and vocational education and training all follow the same structure, which is presented in Figure 4 (next page) as regards basic education (Ouakrim-Soivio 2015). The normative part of the steering system comprises the Basic Education Act and Decree, Government Decrees, the National Core Curriculum, the local curriculum, and the individual schools' annual plans based on the NCC.

The latest curriculum reform aims to reflect the multiple changes taking place in the surrounding world and their effect on children and young people, and on their learning, schoolwork, and life skills. Education and the school are seen as having both a reactive and a proactive role in regard to these changes; the school must not only prepare students for the future but define and construct that future for its students. At the core of the recent basic school curriculum are ideas around students' sense of meaning, joy in learning, active involvement in their surroundings, and a school culture that promotes enriching interaction between students and teachers.

Figure 4. Development Process of Basic Education Curriculum



The NCC and Local Curricula

The local curriculum is an important tool in the Finnish system to ensure coherence and consistency, while balancing national and local goals. It plays a key role in implementing national targets and in setting out goals and tasks considered locally important. Localities, whether schools or municipalities, draw up local curricula and annual school plans based on the National Core Curriculum. The local curricula can complement the objectives, core content, and other aspects related to instruction with local emphases but cannot dismiss those presented in the NCC. The specific needs of students, other local specificities and results from the school's or the municipality's self-evaluation and development work are taken into account in the modifications of the local curriculum (EDUFI 2016a). One specific asset of the dual structure of the NCC and the local curriculum is that in the creation of the latter, the locality is involved in the discussion of both the general goals and values of education and the concrete questions of its implementation in "our school."

The local curriculum lays a common foundation for daily schoolwork. It is a strategic and pedagogical tool, which defines the policies for the education provider's operations and the work carried out in schools. Moreover, the curriculum links the operation of schools to other local services and activities aiming to promote the wellbeing and learning of children and young people.

The education provider is responsible for preparing the local curriculum, a process informed by the NCC's decisions regarding the implementation and organization of basic education, including instruction, assessment, support for learning, guidance counselling and pupil welfare, cooperation between home and school and other school-based activities. The local curriculum can emphasize certain of the NCC's goals or policies, as appropriate. When preparing the curriculum, the education provider accounts for specific student needs, specific local circumstances and the results of local self-evaluation and development efforts (NCC 2014, 8-9).

All education providers shall evaluate the education they provide and its impact on students and take part in external evaluations of its operations. The purpose of both the internal and external evaluation is to improve educational provision and the conditions for learning. The monitoring, regular evaluation and development of the local curriculum and the schools' annual plans are part of this obligation (NCC 2014, 10).

When changes are made in the national core curriculum, corresponding changes must be made in the local curricula and implemented in practice according to the agreed timeline (for an example, see Chapter 12 for the interim curriculum reform regarding special education). The education provider may also revise the local curriculum and improve its quality and effectiveness based on local needs or in response to local development efforts.

Elements and Decisions in the Local Curriculum

The example presented in Box 2 on the following page is from basic education but both general upper secondary and vocational education and training follow the same structure and guidelines.

The local curriculum, the annual plan, and any other related educational plans are prepared by the education provider in line with the goals and principles described above. The education provider may delegate decisions regarding the local curriculum to schools for when they prepare school-specific curricula.

This section specifies the curriculum-related decisions and the elements in the curriculum that are subject to local decision-making. Each main chapter of the NCC defines the elements that must be decided and described in the local curriculum with reference to the themes of that chapter, as in Box 2 on the next page.

Box 2. Elements in the Local Curriculum

Obligations and detailed guidelines

The education provider shall resolve issues and make decisions about preparation of the local curriculum:

1. Whether the local curriculum will be common to all schools, fully or partly applicable to individual schools, regional, or if a different approach is opted for
2. The languages of instruction for which the curriculum will be prepared and approved (instruction provided in Finnish, Swedish, Sámi and, if necessary, some other language)
3. The structure of the curriculum and the order in which the topics are approached; the form in which the curriculum is published
4. How the staff, students and guardians participate in the preparation, evaluation, and development of the curriculum, and how participation of guardians in different life situations will be accommodated
5. How cooperation on curriculum preparation with pre-primary education and other early childhood education as well as with post-basic education institutions will be organized
6. Which other parties will be involved in preparing and implementing the curriculum and how this cooperation will be organized
7. How local features and needs, information produced by evaluations and development efforts, and local development goals and other local plans will be taken into account in the preparation of the curriculum

The education provider shall make decisions about the specific aspects of the curriculum and describe how these aspects are prepared and developed:

1. How the sections concerning student welfare and cooperation between home and school are drafted in collaboration with the municipality's social welfare and health authorities
2. How curriculum implementation is monitored and how the curriculum is evaluated and developed
3. Which local plans and programs complement and contribute to the implementation of the curriculum (for instance, a plan for morning and afternoon activities, a program for sustainable development, a plan for gender equality, a cultural education plan, and an ICT strategy)

The education provider shall make decisions about and describe how the curriculum is related to the organization of education:

1. How single-structure basic education and cooperation related to the transition is promoted (within basic education, with pre-primary and other early childhood education, and with educational institutions representing post-basic education)
2. Whether education or part of it is organized as multi-grade instruction
3. Whether education or part of it is organized as instruction that progresses from grade to grade or as grade-independent learning based on students' personal study plans
4. Whether education mainly comprises instruction divided into individual subjects or is provided fully or partly as integrative instruction and if so, which are the main features of this integrative instruction
5. How lesson hours are allocated to the core subjects in the different grades, to optional lessons in artistic and practical subjects, and to subjects that are optional for the students as required in the Government Decree (i.e., the local distribution of lesson hours)
6. What is the education provider's foreign language program; what languages are on offer and in which grades the instruction in the different languages starts (the languages at advanced A-level, beginning currently at grade 1, include nationally English, German, French, Spanish, Swedish/Finnish and Russian, with Swedish/Finnish mandatory at mid-level beginning at grade 6 if not chosen at the A-level)
7. Which optional subjects are offered to students and at what grade-levels are they taught
8. Is there a special instructional or pedagogical emphasis guiding the school's instruction and if so, how it is implemented; how is it reflected in the distribution of lesson hours and in the goals and content of the education
9. How guidance counselling is organized or how the guidance counselling plan describes the structure, operating methods, and division of labor and responsibilities within the organization of guidance counselling, as well as cross-sectoral networking, cooperation between home and school and with working life, and arrangements for the students' introduction to working life

Source: National Core Curriculum, 2014

The Role of the Schools' Annual Plan

Throughout Finland, schools produce an annual plan, or year plan, developed collaboratively by the principal(s) and the teachers and approved by the Education Department of the respective municipality or equivalent body. As a binding document, the plan guides teaching and learning during the school year. Within the document are certain issues which might or are known to change during the ten-year term of the national curriculum and are thus described in the annual plan:

1. The dates of school days and holidays
2. Syllabi (and timetables) for all classes of the school
3. How the distribution of teaching hours is applied (the national distribution of lesson hours is the minimum but allocated for several grade levels at a time; likewise, if the school offers additional teaching hours, they are confirmed here)
4. School-specific subjects (e.g., which foreign languages are offered, other optional subjects)
5. School-specific teaching objectives
6. Pedagogical priorities (e.g., the use of the Montessori method)
7. After-school clubs
8. School visits, especially if there are extra costs (reliance on parents' financial support is prohibited)
9. The key events during the school year
10. Possible theme or focus area for the school
11. List of the year's teachers and other school personnel, and teachers' confirmed teaching hours per teacher

There is wide latitude for schools in developing the annual plan but the items listed above are the most commonly included. One reason is that they describe and justify how the school budget will be used. Additionally, including out-of-school activities in the approved annual plan ensures that the school's insurance policy will cover the associated personnel and students. And if there is a school-specific need for certain pedagogical approaches such as co-teaching in large groups (from 50 to 100 pupils with 3–5 teachers), these approaches are also described in the annual plan, even if there are no official rules regarding class size or teacher collaboration. The annual plan can also serve as a pedagogical record, denoting which transversal skills are stressed in what way, for example, or what multidisciplinary learning modules are compiled during the school year.

Challenges in the Local Implementation of the NCC 2014

Two components of the NCC 2014 especially caused confusion among education providers and teachers: assessment and the new multidisciplinary learning modules. In assessment, the main sources for confusion were

the unclear conceptualization of formative versus summative assessments, and the fact that, in each subject, the objectives defined for teaching differed from the assessment criteria defined for student learning. Additionally, the assessment criteria for broad competence-oriented goals did not include content. Moreover, the assessment criteria were defined by grade span (grades 1–2, 3–6 and 7–9), which meant that teachers might be responsible for grading students on learning objectives they had not taught to those students. This is problematic, especially for final grading at the end of basic education. The multidisciplinary learning modules of the so-called "phenomenon-based learning" are particularly problematic as the NCC only includes broad guidelines for them, with no specific reference to either content or duration, leaving space for considerable variation across municipalities and schools.

As a follow-up to the curriculum reform of 2014, the EDUFI collected feedback from education providers and schools via a digital questionnaire in 2017, after the launch of the NCC for pre-primary and basic education. A little over half (53 percent, n = 376) of education providers answered the questionnaire covering the following themes:

1. How did the curriculum reform—including the preparation of the local curriculum—succeed?
2. How are the guidelines implemented in the local curricula?
3. What local solutions were created for curriculum development, implementation, and organization (e.g., lesson distribution, language program, optional subjects)?
4. What are schooling providers' perceptions and opinions about the national core curriculum and the NCC reform?

According to the respondents, the easiest components to adapt locally were transversal competence (although apparently most did this by simply reproducing them in the local curriculum) and the subject-specific parts. The chapters regarding assessment, integrative instruction, and multidisciplinary learning modules were the most difficult to adapt.

In addition to the questionnaire, the EDUFI collected and evaluated 70 local curricula for basic education between 2015 and 2018. Their evaluation found that the most problematic sections of the NCC seemed to be those describing the organization of schoolwork to promote learning and wellbeing (Chapter 5 of the NCC) and optional subjects (Chapter 12 of the NCC). The evaluation also found large variation regarding teaching hours, meaning that poor municipalities only offered the minimum hours required by the Decree, while better financed municipalities tended to offer more lesson hours, for example in the form of optional languages.

The subject-specific part of the NCC follows the Decree on the Distribution of Lesson Hours by defining the objectives and content for teaching grades 1–2, 3–6 and 7–9. This can lead to variation among municipalities

and even among schools within a municipality in how learning objectives and course content are adapted to the different grade levels. This can cause problems for students changing schools, but it can also raise concerns about students' equal rights due to variation in the implementation of the intended curriculum.

The most common and coherent subject-specific parts of the local curricula were mathematics and Finnish/Swedish (Mother tongue and literature by its subject name), while the most varied and unclear were religion, ethics, history, and social studies.

One of the few—and the most recent—evaluations of the 2014 curriculum reform was carried out by the FINEEC in May 2020. The evaluation comprised 33 visits made to pre-primary education units and schools, including surveys directed to their teachers and analyses of their (local) curricula and annual plans. During the evaluation visits, discussions were conducted with the teachers as well as with the directors of the pre-primary education units and the school principals. In addition, the visits included observations of teaching and learning situations, a rarity in Finnish education evaluation practices. According to the results of the evaluation, the curriculum reform of 2014 increased teachers' reflection on their own work and supported the developing of working practices such as the use of diverse learning environments and teaching methods. The activities in line with the *learning concept* of the NCC had been realized as interactive learning and the strengthening of the active agency of the children and students, among other things.

The evaluation visits showed that the multidisciplinary learning modules could, when successfully implemented (see Chapter 11), become a collective learning process that supports the development of the school culture (NCC 2014, 27–30). Learning modules had increased collaborative planning and participation in both the pre-primary education units and in schools. On the other hand, there were clear differences between local interpretations of the NCC's guidelines for the multidisciplinary learning modules and its suggested objectives of transversal competence (Saarinen et al. 2021). The evaluation concluded that a true integration of transversal competence into pre-primary and basic education would require more time for discussion and sharing of good practices between teachers. While the implementation of transversal competence and the development of multidisciplinary learning modules had gotten off to a good start (see Chapter 11) neither had been fully realized: the many pre-primary education units and schools did not exhibit a shared understanding of their objectives and importance:

> *The evaluation results show that some of the content of the curricula have been understood and interpreted in different ways at the local level, which has impaired the achievement of the objectives. For example, the interpretations of transversal competence and multidisciplinary learning modules have led to varying ways of implementation. More attention should be paid to explaining the key concepts of the reforms in the guidance, support and training provided for the deployment of the curricula both at the national and the local levels. (Saarinen et al. 2021, 13)*

The evaluation concluded that at the preparation and implementation stages of the local curricula, special attention should be paid to guidelines and training related to the key new features of the curriculum reforms. Steps in this direction were taken in 2020–21 regarding the renewed assessment criteria. However, it is also understood that the implementation of the new curriculum is a long process, requiring time for discussion and cooperation. One of the outcomes of the evaluation was that discussion among teachers, difficult to arrange even under normal circumstances due to the hectic pace of pre-primary and basic school life, was an even harder sell because of the abstract or even "idealistic" nature of the curriculum. The reluctance of staff to discuss the curriculum then prevented pre-primary units and basic schools from achieving the content-related objectives set by the NCC. Accordingly, the evaluation report stressed the need to discuss the objectives and key content of the curriculum on a regular basis to enable the document to become truly "alive" (Venäläinen et al. 2020).

10

Assessment and Evaluation

Assessment in Finnish basic schools can be summed up as "no testing but lots of exams," with a lack of standardized tests but many school-based assessments and exams. Resistance to national standardized testing has been a guiding principle of the basic school from its onset. Yet, the lack of comparability of students' grades across schools and municipalities has become a familiar sore point in the system, even if the NCC has tried to address this by including criteria for "good performance" in the different subjects since 2004. It is hoped that additional assessment criteria approved in spring 2021 will do more to alleviate the problem. Only time will tell if these new criteria will be sufficient and what effect the continued lack of any kind of exit exam will have on schools and students during the crucial transition to upper secondary education.

The proficiency of Finnish students is mainly measured with school-based assessment (SBA), where teachers track their students' progress with continuous formative assessment in class combined with regular (and too frequent, according to most students and parents) classroom exams. As noted in Chapter 8, a main concern of education providers regarding the NCC 2014 is assessment, especially the new emphasis given to formative assessment and to (students') self-assessment. Many teachers welcomed this, but others were concerned that the emphasis caused confusion regarding both the role of self-assessment (should students influence their own grades?) and summative assessment, which was not clearly differentiated from formative assessment in the curriculum.

The lack of standardized testing in the basic school combined with the high stakes final grades that determine students' choice of upper secondary education, shown in numerous studies to fluctuate according to the mean level of proficiency at a given school (grading tends to be stricter in schools with a higher mean achievement), makes this situation problematic. Given that this issue had been under discussion for a long time (e.g., Ouakrim-Soivio 2015), it is somewhat surprising that the EDUFI waited until implementation of the NCC 2014 began in 2016 to rewrite the chapter on assessment and to reform the assessment criteria first adopted in the NCC 2004. The revision included adding criteria for grades 5 (pass), 7 (average) and 9 (very good) in addition to the grade 8 (good) already included in the NCC. It is noteworthy that before this reform, there had been no criteria for (minimum) proficiency in any subject, which might explain the quite skewed distribution of grades (e.g.,

Kupiainen 2016a, 2019a) and the small number of students retained to repeat a class. In 2018, the EDUFI invited an expert group of assessment researchers and a board of stakeholders to support and guide the EDUFI with the criteria. The new criteria was approved in spring 2021 and implemented starting in autumn 2021. The process confirms that the Finnish education system is committed to keeping the matriculation examination (see Chapter 10) as the only high stakes exam in Finland.

Assessment is mainly presented in Finnish education as a process aiming to support learning and to provide students with feedback on their proficiency. In addition, as we have noted, Finland has maintained a relatively antagonistic attitude toward assessment, grading and recognizing a lack of proficiency. This might be why the focus on formative assessment in the NCC 2014 was met with such enthusiasm by many teachers, who understood it to be an intentional move away from summative assessment. They welcomed formative assessment's pedagogical focus on guiding students' learning with the aid of feedback and helping increase their awareness of how they have performed in relation to the objectives of the curriculum (e.g., Toivola 2018). The NCC also allowed teachers to provide written feedback rather than numerical grades up until grade/year 8. This caused concern among parents, many of whom felt at sea about their children's progress. The revised chapter on assessment requires that numerical scores be given starting in grade 4. Many teachers continue to use a combination of written and numerical assessment. For example, a teacher who includes a written assessment in a report card might grade a student's classroom exams numerically to better inform both student and parents about the child's progress. Comments from both education providers and teachers on the proposals for the new assessment criteria showed almost unanimous support, with many proposing clear assessment criteria for all the scores from 4 to 10. This seems to imply that teachers have felt a lack of guidance in the process of assessment—understandable given they had only generally worded goals and criteria for just the one score (8 = good). The creation of additional grading criteria also brought attention to the often quite abstractly worded competence goals against which students' achievement is assessed. (The Teacher's Union, which has otherwise taken a strongly favorable stance toward the reform, raised this issue.) The expert group named to guide the assessment reform process also recommended cutting down the number of criteria in the different subjects, which were thought to be excessive. But its mandate did not extend to such a change in the NCC and it is likely that the issue will be addressed in the next NCC. The fear is that having so many criteria makes their use cumbersome and endangers the goal of aligning assessment across schools.

In the lower secondary grades (7–9) and especially regarding final grades, teachers' assessment work involves not only support and guidance, but also summative grading based on the objectives and assessment criteria set for the different subjects in the NCC. This is especially important for students as they prepare for the transition to upper secondary education, which is largely based on their final grades. In this respect, summative grading and

its comparability across institutions is important for guardians as well, as it may be their only means of tracking their child's advancement through school.

Maybe due to the lack of comparable data on learning outcomes and the strong emphasis on equality (and the related distaste for accountability and ranking lists), the recent international discussion regarding data-driven approaches to educational policy and leadership (e.g., Kurilovas 2020) have not met with much enthusiasm in Finland. Yet, despite their poor comparability across schools, students' final grades from basic schools are used in population-level statistics and research, as there are no better indicators for the purpose. It will be interesting to see if the new grading criteria change the picture and whether they open the way for a more data-driven education policy in Finnish schools and municipalities.

Assessment in the National Core Curriculum

The Basic Education Act (628/1998) is very concise regarding student assessment, stating only, "The aim of pupil assessment is to guide and encourage learning and to develop the pupil's capability for self-assessment. The pupil's learning, work and behavior shall be variously assessed." For the assessment of learning attainment and student progress, the Act refers to the Education Decree (852/1998) and to the EDUFI. The Decree states that students and their parents are to be informed "often enough" regarding the student's progress in learning, study skills or working, and behavior. It states that teachers can use either verbal or numerical reporting in the end-of-school year report card, and that while the teacher gives the grade it is the principal who determines whether a student will repeat a class, in consultation with the student's teacher(s).

In the NCC, assessment of learning comprises the assessment of the student's progress and proficiency, and the teacher's feedback to the student. Progress is to be examined in relation to the student's previous proficiency and earlier objectives. Proficiency, on the other hand, is to be assessed against the goals set for learning. The dual goals of assessment have perhaps resulted in confusion for teachers around the uses of formative and summative assessment. Some of this confusion has been alleviated in the revisions to the assessment chapter of the curriculum, which is to guide assessment from 2021 on. The new text clarifies the difference between formative and summative assessment. In both, students' performance and learning outcomes are to be assessed using diverse methods but always regarding the national criteria, reflecting the cumulative learning across basic education. The new formulations also clarified the different forms of feedback—self-assessment, peer-assessment, and assessment by teachers—of which only the last has bearing on grading.

As stated above, assessment is to be based on the objectives set for teaching (and in the new version, for students' learning) according to the national criteria set in the NCC. In the NCC 2014, the only assessment criteria are for a score of 8 (good), and they are only given during grade 6 and for the final assessment at the end of grade 9. As

of 2021, there will also be assessment criteria for the grade 9 final assessment for scores of 5, 7 and 9 (adequate, sufficient, and very good). There is no set timetable as to when the more fine-tuned criteria will be written for a score of 6, meaning there are as yet no common guidelines regarding minimum proficiency for students transitioning from class-teacher based primary level to subject-teacher based lower secondary level schooling. Regarding final grading, the number of objectives and criteria varies by subject from eight (some optional foreign languages) to 20 (mathematics), with the number found by many (including the Trade Union of Education) to be excessive.

The NCC states that the national criteria are to be transferred from the NCC to local curricula without change in order to safeguard fair assessment. There are no specific criteria in the NCC for assessing transversal competence but each of the subject-specific assessment criteria indicate how competence should be assessed as an integral part of each respective goal-area. As for the multidisciplinary modules, their assessment shall be included in the respective goal-areas of the subjects they combine.

Obviously, teachers take students' proficiency into consideration when giving a verbal assessment or awarding a numerical grade. The NCC emphasizes the use of multiple methods and opportunities for students to demonstrate (and for teachers to record) proficiency across the study periods and modules. In practice, this means that some principles guiding assessment and grading emerge locally and some come directly from the national model (Ouakrim-Soivio 2015).

Assessment Practices in the Basic School

Students' proficiency is assessed primarily by their own teachers (School-Based Assessment or SBA). This means continuous formative assessment or supportive feedback in class (Hattie & Timperley 2007; Heritage 2007), punctuated by classroom exams covering the most recent course content. The latter occur on average two times a semester in each academic subject, with possible extra essays written in Finnish/Swedish. This all comes to approximately 15 to 20 exams per academic year (i.e., one exam per week) for an average 6th to 8th grader. Naturally, there is much variation in the use of written and graded exams, with some teachers leaning more toward portfolio-like assessment and some to smaller but more frequent quiz-type check-ups of students' progress. Using the terminology of assessment *for* learning and assessment *as* learning and drawing on the idea of Vygotsky's (1994) Zone of Proximal Development, the NCC 2014 tried to guide teachers to adapt their teaching to better meet students' learning needs based on their current level of proficiency. Formative assessment in class includes teachers' oral and written feedback, students' self-assessment, peer- assessment, group assessment, learning discussions, portfolios, and more. Summative exams covering the learning of a whole year or even a whole term are rare, and the NCC directs teachers to base their end-of-term or end-of-year grades on all the information, formative and summative, accumulated over that period.

According to the NCC, students have the right to a report card documenting their proficiency or advancement in the different subjects, in study habits and in behavior twice a year, at the end of the fall term and at the end of the school year. According to the NCC 2014, the report card can use descriptive verbal grading until the end of grade 7. Most schools use numerical grading at grade 5 if not earlier, and, as noted above, the revised chapter on assessment implemented in 2021 says numerical grading should begin no later than grade 4. Teachers may still use written assessment in addition to the numerical grade, an option likely welcomed by many teachers as it has been used in schools for more than a hundred years.

As the syllabi and learning goals of the different subjects in the NCC cover several grade levels (see Chapter 8), the final assessment or grading at the end of basic school is to be based on the whole syllabus of the subject across grades 7–9.

Lack of Comparability of Grades Across Basic School

The problems related to the lack of grade comparability have been tacitly acknowledged for almost as long as there have been national assessments. For years, upper secondary teachers had noted marked differences in the knowledge and skills of students who had completed basic education with the same grades. Around 2010, however, the grading discrepancies appeared in public reports comparing assessment results to students' school grades in the respective subjects. Upper secondary education as a whole welcomed the publicization of the skewed results, while schools with higher average achievement whose students are more harshly graded (risking unfair treatment in the secondary school application process) were particularly pleased. Perhaps reflecting the general trust Finns place in their education system, there has not (yet) been any open revolt by parents regarding their children's right to fair grading. However, press coverage of the subject might have been a factor in the EDUFI's decision to reform the norms and guidelines for assessment in basic education.

Assessment in the General Upper Secondary Schools

The EDUFI prepared the chapters on assessment in the NCC for basic education and the NCC for general upper secondary education at the same time, so it is not surprising that the latter hews closely to the former (NCC 2015; NCC 2019). However, the two chapters differ regarding the role of assessment as part of ongoing schoolwork. In upper secondary education, the critical feature of assessment is the matriculation examination (see Chapter 9) as a mandatory exit exam. Likewise, the course-based structure of upper secondary studies with a fixed exam following each six-week unit of study differentiates it from basic education. Yet, the general objectives of assessment are similarly defined, including the way they juxtapose formative and summative assessment, the use of multiple methods of assessment, and the use of self- and peer-assessment. For both levels of education, assessment is defined as an interactive process between teacher and student (discussions between the two may

even help the teacher determine the final grade) with emphasis placed on continuous formative assessment during the study modules or courses. According to the NCC (2015/2019) the role of formative assessment is to promote, support, and guide students' learning, to help them achieve their objectives, to provide feedback and encouragement, and to help them understand assessment for learning.

Most Finnish general upper secondary schools follow a structure that divides the academic year into five or six periods or "mini-terms," allowing students to study five to seven course modules of their choice at the same time (see Chapter 4). In most schools, each period ends with an exam or assessment week for the studied courses or modules, but teachers can also use summative assessment during the periods. Naturally, teachers use formative assessment throughout the course even in the relatively large classes (easily more than 30 students in many subjects in the sought-after schools). Depending on the subject, students are awarded numerical scores (from 4 = fail to 10 = excellent) or given a mark of pass/fail. Even if a student passes every course and module during the three to four years of upper secondary studies and has a report card saying as much, they must still pass the centrally administered matriculation examination in order to be awarded the formal certificate for passing upper secondary studies.

The Matriculation Examination

The matriculation examination, a cherished tradition going back to the late 1870s as an oral entrance examination for students entering the University of Helsinki (Kaarninen & Kaarninen 2002) but transformed to a written exit examination for upper secondary education soon after that, is the only external high-stakes examination in the Finnish education system. The matriculation examination has the triple role of assessing (academic track) upper secondary students' mastery of the objectives of the curriculum, indicating their general maturity and readiness for tertiary studies, and providing feedback for schools on their success in fulfilling the goals set for upper secondary education.

The examination is organized bi-annually by the Finnish matriculation Board, since 2019 a separate unit within the EDUFI. The examination is centrally compiled, administered, and marked after an initial marking by the teacher, based on centrally prepared guidelines. The examination was computerized between 2016 and 2019, at a pace of two to four subjects per cycle. This decision, made by the Matriculation Examination Board in 2014, has had a significant impact on the promotion of digital learning in Finland (see Chapter 10).

The examination comprises a separate test for each academic subject and study level, covering all the mandatory and auxiliary national courses of a respective subject (3–13 courses depending on the subject). Reflecting the broad syllabus of Finnish upper secondary education (see Chapter 4), the full examination consists of 39 separate

exams in 23 subjects, some offered at two levels.[13] Of these exams, each student only needs to sit for four, which must include an exam in the language of instruction (Finnish/Swedish) and three of the following: the other national language (A or B-level), a foreign language, mathematics, or a natural or socio-humanistic science. At least one exam should be of advanced level. In addition to the mandatory exams, students can sit for an exam in any of the subjects in which they have passed the mandatory courses. Most students take their examination in two sittings during the third year of upper secondary education, but they can stretch the exams to either the year two spring or the fall of year four. The mean number of exams per student is 5.6 but there are annually one or two matriculates who have passed (even with the highest grade) 10 or more exams. Due to the two languages of instruction, the exam with most examinees annually is A-level English. The exams differ by subject, but most contain some multiple-choice questions with four to six essay questions or more elaborate mathematical problems. Except for the exams in C-level foreign languages, all exams are presented to the students in one six-hour session, three exam days per week, except for Finnish/Swedish (language of instruction or "Mother tongue and literature" as is the official name of the subject), in which students' competence is measured with two different exams. To save examination time, some of the exams are offered in pairs on the same day, arranged in such a way that the most common combinations of subjects for students to choose in their examination (e.g., History and Social studies, Physics and Chemistry) are on different days.

The matriculation examination is organized during a three- to four-week period at the same times across Finland with set days for the different exams. The preliminary assessment of each student's exam is done by the teacher(s) of the given subject, according to certain guidelines. After that, all exams are sent to the Matriculation Board for centralized assessment. Censors appointed by the Board finalize the assessment by reviewing each examinee's test against the criteria decided by the Board's subject sections. After that, the normative grades are superimposed on the criterion-based scores.[14] The goal of this hybrid assessment, adopted in the 1960s when the examination offered much less choice for the student, was the comparability of grades across subjects and exam cycles (Beguin 2000). The increase of exam choice since the late 1990s, however, has eroded the bases for comparability due to varying abilities of the students sitting for the different exams (Kupiainen et al. 2016;

[13] Finnish/Swedish/Sámi as mother tongue or language of instruction, Swedish/Finnish as the second national language (A and B-level), Sámi at C-level, English and other foreign languages: German, French, Italian, Latin, Portuguese, Russian and Spanish, most offered at both A and C-level), Mathematics (A and B-level), Biology, Geography, Physics, Chemistry, History, Social Studies, Philosophy, Psychology, Religion/Ethics, and Health Education.

[14] The scale and common parlance use Latin rubrics even if there is also a numerical scale with 0 for a failed exam and 2–7 credits for the approved ones: improbatur (fail = 0), approbatur (2), lubenter approbatur (3) cum laude approbatur (4) magna cum laude approbatur (5), eximia (6) and laudatur (7).

Kupiainen et al. 2018). To cope with this, since 2014 the Matriculation Board has added the step of setting grade cut-points for the different subjects.[15]

Since 2018, university student selection has reinforced the role of the matriculation examination. According to the reformed guidelines, on average 60 percent of new students should be selected based solely on their success in the matriculation examination. The reform has raised strong opposition, as the traditional entrance examinations were long welcomed as a "second chance" for students who did not do well at school. Yet, even before the reform about half of the students taking the entrance examination were awarded extra credit based on their matriculation examination. Finnish students are well aware that despite there being no national testing in the basic school, there will come a point when they are measured against each other with a great deal at stake. This must be kept in mind when encountering authors who use the lack of high stakes testing to "explain" the Finnish PISA success (e.g., Sahlberg 2011a, 65–68: Paradox 2: Test less, Learn more).

The COVID-19 crisis of spring 2020 both accelerated and hindered the selection reform, undoubtedly putting extra pressure on Finnish youth accustomed to the second chance offered by the entrance examinations. The reform does not mean the full abolition of entrance examinations, however, as Finland is committed to keeping tertiary education open for vocational students well into the future. The goal of the reform is rather a decline in the share of students selected solely on the basis of their performance on the entrance exam. Moreover, the reform has enlarged the options for entering university through field-specific studies in the Open University or MOOC. Maybe the most questionable consequence of the reform is the differentiated credits awarded for the different exams in the selection process. Even if these mainly reflect the predictive value of the exams regarding further learning, they have resulted in affecting students' course choices in a manner that pits subjects against subjects, endangering the upper secondary school's goal of a broad general education.

[15] In this process, the original Gaussian distribution of the grades listed in footnote 5 (5%, 11%, 20%, 24%, 20%, 11%, and 5%, respectively) is corrected for each subject-specific exam using the standardized mean of all the exams of the respective examinees in two consecutive cycles (see Matriculation Board/standardized total scores).

11

Pedagogy and Classroom Practices

In seeking an explanation for Finland's early success in the OECD PISA studies, some suggested the similarity between the PISA Framework and the Finnish curriculum (Lavonen 2008). But many visitors to Finland's classrooms found Finnish pedagogical practices to be "old fashioned," a far cry from the new competence-based ideas of PISA and other contemporary developments. In the more than twenty years since that first PISA, both the PISA and Finland's classrooms have gone through extensive changes. Focus has shifted from teaching to learning, from a subject-based curriculum toward a 21st century orientation, from direct teaching to self-directed learning, and from paper and pencil to digital resources. This shift in approach raises the question of whether Finland's initial success in PISA was actually due to its "old fashioned" practices and whether the nation's subsequent decline in performance can be attributed to a move away from them.

Changes in Pedagogical Language and Practices

The first departure from the highly centralized ethos of the new comprehensive school of the 1970s can be seen in the emphasis of the NCC 1985 on the teacher's role as an active creator of learning opportunities and the personalized learning plans to be created for all students. Some researchers interpreted these first steps toward local and within-class differentiation as the introduction of neo-liberal education policy in Finland, and, together with the simultaneous introduction of national assessment, saw them as a threat to the equality of the basic school. Yet, despite this criticism, the NCC 1985 opened the way for a more student-centered pedagogy, and the student has ever since been at the heart of all educational planning and discussion.

The international discussions that gave birth to the OECD PISA (Schleicher, 1999), the European Union's key competences (European Commission 2002) and the Partnership for 21st Century Skills (2006) entered Finnish education obliquely through the first Assessment Strategy for Basic Education in 1997 (in English in 1998). In the strategy, the concepts of communication and learning to learn were introduced into educational parlance, while in 1996 an instrument for measuring learning to learn as one of the curriculum's key transversal skills was developed for national assessment (Hautamäki et al. 2002; Hautamäki & Kupiainen 2014; Kupiainen et al. 2009).

Transversal Skills

A direct reference to the new thinking was not introduced to basic education until the NCC 2014, using the term *wide-ranging competence* (translated into English as *transversal competence*) and adopted into the NCCs for ECEC and general upper-secondary education in 2015 and 2016/2019, respectively (see Chapter 8). The concept, with only slight modifications in the three documents, covers the following areas: 1) thinking and learning to learn 2) cultural competence, interaction, and expression, 3) taking care of oneself and managing daily life, 4) multiliteracy, 5) ICT competence, 6) working life competence and entrepreneurship, and 7) participation, involvement and building a sustainable future. According to the NCC, transversal competence is to be embedded in the teaching of different subjects and assessed in conjunction with subject-specific goals according to the respective assessment criteria. In practice, the assessment of transversal competence is primarily implemented formatively as feedback and support during the learning process, or as guidance for students' self-reflection regarding their motivation and responsibility, either with the teacher or with their peers (see Chapter 8 for what is known of the current implementation).

Multidisciplinary Modules

To make teaching more integrated, the NCC (p. 32–34) also introduced the idea of multidisciplinary learning modules (see Chapter 8). Pedagogically, the aim was not only integration of the content of different subjects under an umbrella-concept of phenomenon (which led to the term phenomenon-based learning, PhBL) but also to increase both teacher collaboration and student participation in the design of the modules. The introduction of the modules in the NCC has caused much confusion, however.

The confusion stems from a conflation of terms: 21st century skills (which lie behind the NCC's transversal skills), multidisciplinary learning modules, project-based learning (PBL), and integrative teaching / learning all started to all mean the same thing. The international spread of this conceptual confusion can be seen, for example, in Chris Drew's 2020 article on the Finnish multidisciplinary modules, where he observes, "The approach [PhBL] represents a transition to a new cross-curricular way of thinking about organizing learning in schools" (Spiller 2017; Valtonen 2017). Yet, the confusion was not limited to how Finland's reforms were understood outside of Finland. It goes back to the development and early implementation of the NCC 2014. Some education providers and individual researchers (e.g., the City of Helsinki; Lonka et al. 2018, respectively) started to build multidisciplinary learning modules quite detached from subject-specific contexts, and with little attention to securing the gradual development of students' knowledge and skills in the respective subjects.

In the NCC (2014, p. 31–32), integrative instruction and multidisciplinary learning modules are described as follows:

> *The purpose of integrative instruction is to enable the pupils to see the relationships and interdependencies between the phenomena to be studied. It helps the pupils to link knowledge of and skills in various fields and, in interaction with others, to structure them as meaningful entities. Examination of wholes and exploratory work periods that link different fields of knowledge guide the pupils to apply their knowledge and produce experiences of participation in the communal building of knowledge. This allows the pupils to perceive the significance of topics they learn at school for their own life and community, and for the society and humankind. In the learning process, pupils are supported to expand and structure their worldview.*

A precondition for integrative instruction is a pedagogical approach to both the content of instruction and working methods where phenomena or themes of the real world are examined as wholes in each subject and, especially, in multidisciplinary studies. The manner and duration of integrative instruction may vary depending on the pupils' needs and the objectives of the instruction. For example, integrative instruction may take place through

- parallel study, that is studying a single theme in two or more subjects simultaneously
- sequencing, that is organizing topics related to the same theme into a sequence
- functional activities, including theme days, events, campaigns, study visits, and school camps
- longer multidisciplinary learning modules, which are planned and implemented in cooperation between several subjects and which may contain some of the integrative instruction techniques
- selecting content from different subjects and shaping it into integrated modules, and
- holistic, integrated instruction where all instruction is provided in an integrated form, as in pre-primary education.

Almost all education providers and schools organize integrated instruction into weeks or projects, where a larger theme or "phenomenon" such as *Oil* or *Middle Ages* is addressed over a certain period during some or all of the lessons. The main idea behind the integrative modules was to have a new pedagogical approach that would integrate content areas or learning objectives that two or more school subjects have in common. The idea itself is not new for the elementary grades (1–6) where the classroom teachers teach most subjects for their class and have always had relative liberty in organizing their teaching and might also have more ingrained habits of collaboration with their colleagues. In the lower secondary grades (7–9), where classes are taught by subject teachers with different backgrounds, the situation was quite new. The organization and implementation of the modules calls for collaboration, meaning shared time for planning around common objectives and content areas. Most often the multidisciplinary learning modules (a combination of school subjects and/or projects per school year) are defined either in the local curriculum or in the school's annual plan (see Chapter 8).

Due to the NCC's vague guidelines regarding the multidisciplinary modules, there is large variation in how they are realized in different municipalities or schools. In Helsinki, for example, some schools have entirely replaced the traditional school subjects with different weekly phenomena (City of Helsinki 2015). In most schools, however, the implementation of the modules differs little from earlier projects and other special learning experiences.

In her 2017 blog, "Multidisciplinary learning modules—students organize their knowledge into larger entities," Päivi Valtonen gives an extended example of how to plan and implement multidisciplinary learning modules in a way that links them to school subjects:

> *[…] If I planned a multidisciplinary learning module, I would select the theme that is contemporary, relates to the life of every Finn, combines the content of different subjects, and supports children to notice connections between the topics they study at school and the matters related to real life.*
>
> *I think that one such topic could be "Finland at 100 years." The year 2017 is important for us, because Finland became independent on December the 6th, 1917. The goal of the multidisciplinary learning module "Finland at 100 years" could be understanding what the starting point for our country was, what kind of journey have we made and what is our country like now. What could this theme mean in different subjects?*
>
> *For History: Inquiry-based learning project that asks: What kind of Finland we had hundred years ago?*
>
> *For Music: A focus on Finnish music and composers hundred years ago; Asking what is typical Finnish music; or The Finnish national anthem and its history*
>
> *For Arts: A focus on Art and artists hundred years ago or Photography / art exhibitions about Finnish art*
>
> *For Finnish: Discussing videos / digital stories / writings / blogs about Finland; a focus on Finnish poetry; or studying the development of Finnish language*
>
> *For Math: Compiling and analyzing Statistics of Finland*
>
> *For English: Discussing videos / digital stories / writings / blogs about Finland or Compiling facts and stories for foreigners*
>
> *For Home economics: Learning about Finnish cuisine or Food then and now*
>
> *And of course, for a Celebration of the Independence Day in December, staff and students could be invited and Finnish, music and home economic assignments could be focused on organizing the independence party*

Implementation of the kind Valtonen proposes only takes place in some cases. In other cases, implementation of the multidisciplinary modules has led to outright abandonment of the discipline-based structure of the subjects. This has led the EDUFI to take up the issue. In a statement from November 2018, the EDUFI underlined that phenomenon-based education is a *pedagogical* approach, not a reform of the basis or structure of basic education:

> *For example, phenomenon-based learning weeks are one way to implement multidisciplinary learning modules, but the NCC for basic education does not directly oblige phenomenon-based learning or teaching. The method of implementation is entirely up to the municipalities (education providers). Thus, multidisciplinary learning modules or phenomenon-based learning do not replace school subjects, but teaching, learning, and assessing are still based on the school subjects that are defined in the Basic Education Act (1998). Multidisciplinary learning modules are not assessed separately, but as part of the school subjects."*
>
> *Source: EDUFI 2018, translation NOS*

After the statement, the City of Helsinki adjusted its guidelines for schools. While still adhering to a relatively wide interpretation of phenomena-based education, the new guidelines suggested a more traditional interpretation of project-based learning. The following section of Helsinki's new guidelines covers many of the important issues regarding the reform:

> *Helsinki's model of Phenomenon-based learning (PhBL) is at the core of learning in the city. This new pedagogical method requires subject teachers to collaborate to design and implement holistic, student-centered multidisciplinary learning processes. Phenomenon-based learning engages students with wider transdisciplinary phenomena and gets students actively designing their own learning path whilst collaborating with each other.*
>
> *In this approach, a phenomenon is an observable event, and Phenomenon-based learning is a way of using overlapping methods and perspectives to understand that observable event. That observable phenomenon will be something that interests them—environmental challenges, for example, or transport solutions. This represents a transformative shift away from teacher-centered pedagogy towards more student-centered methods.*
>
> *Phenomenon-based learning is flexible and open to change. It is all about making sure children are prepared to adapt to whatever the future holds. It places an emphasis on community spirit, collaborative skills, the application of data, and creative and critical thinking. Whenever there is an event that interests students, schools are encouraged to discuss it soon after. This will increase students' understanding of the world, make them more motivated to learn and develop their skills. Through Phenomenon-based learning, students learn to solve complex real-life challenges in a collaborative way whilst learning to learn.*
>
> Source: City of Helsinki 2020

The acceptance of the reform is far from unanimous, especially among subject teachers, and many education researchers have pointed out that there is a little scientific evidence regarding the impact of phenomena-based education. Despite the EDUFI having collected data regarding the implementation of the modules since the adoption of the new NCC in 2016, there is as yet no clear understanding of how the reform is "practiced" (how subjects are studied, in which combinations and at what length) in schools across the country. It will be difficult also to assess the impact of the multidisciplinary learning modules on student achievement, as students are assessed in each subject according to subject-specific guidelines, and not by any multidisciplinary measures.

One of the few efforts to unravel the effects of the reform is a 2019 master's thesis by Rajani Parkash Naik, titled *The Phenomenon-based learning in Finland*. In his thesis, Parkash tries to "understand Finnish teachers,' teacher trainers,' and school leaders' perspectives on Phenomenon-Based Learning (PhBL) and its implementation as a pedagogical approach." Despite its small scale of just two secondary school teachers, a teacher trainer and two principals, the study paints a picture of the pedagogical expectations and challenges related to PhBL, sometimes including the difficulty of motivating students to shift from learning in the traditional discipline-based way. The study suggests a need for more extensive research into how PhBL has been implemented at different grade levels and, especially, what the impact of the implementation has been on students' general and subject-specific skills and knowledge.

One well-established multidisciplinary module builds on the transversal skill of entrepreneurship in the form of Yrityskylä (*Entrepreneurship Village,* see https://yrityskyla.fi/en/), a learning concept introduced already in 2010 and recognized as the world's best education innovation by World Innovation Summit for Education in 2014 (Earp 2017). The concept, combining entrepreneurship, economy, and society, offers programs for 6th and 9th grade students. The 6th grade program, called Me & My City, is a miniature city where the students work in a profession, earn money, and act as consumers and citizens in their own society. In the 9th grade program, the students compete in managing a company in the global market. Students can take the concept even further in courses at the upper secondary level, establishing and running real companies with their own revenues.

Streaming and Differentiation

The most cherished feature of the Finnish basic school is probably its comprehensiveness, meaning that all children get the same education in the same schools close to home. Yet, as we show in Chapter 12, supporting students with learning difficulties has had a central place in the system, reflecting a willingness to provide some students with enhanced services to ensure that all truly benefit from the equal opportunity offered by the system. As we mentioned in Chapter 3, formal streaming was a feature of the basic school during its early years but was abolished in 1985, as it excluded students (mainly boys and children from lower SES families) who early on chose the least demanding stream from further academic studies. After streaming was abolished, the basic school was

understood to be truly equal, with all variation in outcomes due to individual differences between students. In the 1980s these differences could be attributed to students' home background, but over time even this association grew weak; decades of free education under equally qualified teachers showed their force in diminishing social differences among the new generation (Pekkarinen et al. 2009).

Around the turn of the century, however, the international concern for educational equality and school choice began to raise its head also in Finland. Despite Finnish students' high achievement and the small differences in performance between schools on the OECD PISA-studies, hitherto hidden or unstated forms of selectivity in the Finnish basic school became topics of discussion, first among sociologists of education and then among other education researchers. Concerns emerged about the existence of selective classes within the basic school (Seppänen et al. 2015) which did not align with the idea of a common curriculum for all. The education community had been aware already that in bigger cities, some schools used students' choice of first foreign language as a basis for allocating students to classes, but the resulting between-class differences seemed to be just tacit knowledge shared by the teachers—and by some ambitious parents who used the information to try to get their children into the accelerated class. Even if all classes otherwise followed the same syllabus, students beginning with a foreign language other than English automatically began with English at grade/year 5, gaining proficiency in two foreign languages instead of just one. The option for an A2-level language other than English is available for others as well but the offerings differ by municipalities and schools. As we have mentioned previously, the inability of poor municipalities to match the extra academic offerings of their affluent counterparts is widely viewed as an anti-egalitarian element of the Finnish basic school.

According to the results of the 2011 IEA (International Association for the Evaluation of Educational Achievement) TIMSS (Trends in International Mathematics and Science Study) study, between-class differences in the Finnish basic school far exceeded those in the other Nordic countries (Hansen et al. 2014). And in 2019, a study by Kupiainen and Hotulainen showed that these differences are closely related to the way students are assigned into classes based on previously shown aptitude or ability.

Besides the selective language classes referred to above and certain music courses that admit students based on ability, differentiation is mainly left to teachers. The only structural streaming many schools use is for math classes in the final year of basic education (grade 9), an arrangement mainly based on students' willingness to prepare for the advanced (A-level) math in the general upper secondary schools. The system differs from the old streaming, however, with the option being more—not less—math than is prescribed in the curriculum. Lately, however, the increasing integration of pre-primary education with the first two years of basic school might begin to vary the number of years it takes children to reach grade 3, depending on how quickly they learn to read. Part of the impetus seems to come from a goal of ensuring that students are academically proficient before they leave

the stage where "learning to read" switches to "reading to learn." While it might be expected that if some children's entry is delayed, others will be accelerated, in fact early entry is even less common today than it was some 10 years ago,[16] and discussion has rather centered on the academic disadvantage to children (especially boys) born toward the end of the year, close to the cut-point of school-age (e.g., Ukkola & Metsämuuronen 2019).

In terms of acceleration of instruction within classrooms, the digital platforms increasingly in use at schools (see Chapter 11) offer teachers new possibilities for differentiation both for students whose right to challenging or accelerated learning experiences might have been neglected in the Finnish basic school and for students in need of more support and or closer monitoring (see Chapter 11). Likewise, the *open learning environments* which have become almost the architectural-pedagogic norm in new school buildings (see Chapter 10) offer new possibilities for differentiation through within-class groupings within the larger space monitored by multiple teachers.

Learning Resources and Materials

According to the Finnish Publishers Association, 95 percent or more of basic and upper-secondary education schools use learning materials produced by a professional publisher. Of them, 80 percent are printed and 20 percent digital. Regarding the latter, the term *textbook* is misleading, as most digital solutions offer a wide variety of materials, containing "traditional" audio and video material but also including interactive elements. Most of the digital material comes from the same five publishing houses as the traditional text and exercise books as well as diverse other materials for students and teachers, including extra exercises and practice exams. In addition to the established publishing companies, the change to digital (see Chapter 11) brought to the market one new company providing only digital "textbooks." Yet, independent of the publisher or the form (printed/digital), the materials are prepared by a group of experienced teachers and adhere to the NCC.

In addition to the NCC and common standards for teacher education, Finnish basic education relies on the use of the same six-volume textbook series nationwide, another sign of equality across the system. According to a large-scale national survey on the use of learning resources (Viteli, Tanhua-Piiroinen & Kaarakainen 2020), students were using, on average, textbooks and notebooks daily and printed exercise books and teacher-prepared copied material weekly. Teachers (N = 6409) emphasized the use of textbooks while students (N = 16,568 representing grades 2, 5 and 8) stressed the role of exercise books and auxiliary copied material.

Learning materials, whether printed or digital, are typically understood as just part of the teaching / learning process or the *pedagogical flow*, which is primarily seen as an interaction process between the teacher and the

[16] Realized by guardians' request through a school-readiness test, executed by a school psychologist.

students. The role of (high) quality learning materials is quite important. While guaranteeing a shared understanding of the NCC, prepared materials save teachers time that they can allocate to more direct teaching/learning tasks. Prepared materials also provide targeted learning support for students and allow guardians to follow their children's progress.

Teachers are generally free to adapt learning materials as they see fit and can compare the materials against the goals, contents, and assessment criteria of the NCC. In most publishing houses that supply learning materials for basic or upper secondary education, the materials are prepared in working groups of three to seven authors, mostly experienced teachers of the subject at the respective grade level. This is a strategy to ensure that the authors have appropriate content knowledge, are familiar with the relevant pedagogical approaches, and can employ language suitable for students at the levels of both linguistic and content proficiency. Free market competition between publishers is understood as a way to guarantee the quality of learning materials, given that government-driven school inspections were abolished in 1985. Only a limited number of publishers of Finnish language materials are on the market, and most are considered high-quality.

The biggest recent changes to learning materials relate to transversal competence and their integration into the different subjects in the NCC 2014. These skills (see Chapters 8 and 10) have been embedded into both printed and digital materials (Ouakrim-Soivio, Najat & Kupiainen, Sirkku. Interview with Markku Pelkonen from Otava. Spring 2020).[17] Of the two, digital materials are seen to provide additional possibilities for student engagement and interaction, including with peers through shared platforms, commonly used in some schools and municipalities (see the following sub-chapter on digitalization).

In basic education (grades 1–9), printed material for students is still more commonly used even if digital materials are becoming more and more popular either solely or alongside printed materials. Teachers' materials, on the other hand, are already almost solely (95 percent) digital, some being just electronic versions of the printed, but a growing share designed to be digital. Most teachers welcome this change, as digital support materials are seen to release more time for actual interaction with students. While the content of the printed and digital materials is the same and covers the same content areas defined in NCC, the digital presentation of the content is often richer and more engaging for the students (e.g., video, animation, and interactive tasks). Most digital materials also offer exercises allowing students to advance at their own pace with immediate feedback, which also offers

[17] Source: private discussion in spring 2020 with director Markku Pelkonen from Otava, one of the major publishing houses in learning materials.

possibilities for better-monitored differentiation in class. In this, the new digital platforms support the NCC's goal of self-directed learning.

Digitalization of Learning

The history of digitalization in Finnish education goes back to the time of the streaming system, when some grammar schools began to offer optional courses in Information and Communications Technology (ICT) and built language laboratories for the learning of foreign languages (a tradition that carries on in the audio portion (*kuullun ymmärtäminen*) of the matriculation examination). Digitalization in the contemporary sense was introduced into basic education in the 1990s as part of a general push to prepare students for the rapidly changing world of digital technology. At this early phase, Finland was a forerunner in Europe with a high percentage of schools equipped with Internet connection and ICT-classes. In the European *ICT in Education* survey of 2011, Finland was above average on most technology indicators. In the use of ICT in class, however, Finland lagged considerably behind most other European nations—except for its somewhat surprising use in vocational education (European Schoolnet 2012).

Soon after the report showed Finland behind, digital learning became one of the key issues in educational discussion. The 2014 NCC promoted a wider understanding of ICT technology as one of the seven transversal skills that should be integrated into all subjects. Even before this, the Finnish government had promoted digital learning as a key means to prepare students for working life and had included it as a major focus of education policy. Just prior to implementation of the NCC 2014 in fall 2016, the new government of Juha Sipilä coined the term *Digi-leap* to characterize Finland as a beacon of innovative learning—particularly in the face of early reports of declining learning outcomes. In many respects, schools were late arrivals to the digital age, as most students were showing up to school with digital devices in their pockets and backpacks well before the *Digi-leap* (leading to inevitable disputes over their use). It should be noted that a digital platform had been used in home-school collaboration from the early 2000s (Oinas 2020, 34).

During the past decade, the Finnish National Agency of Education, the Ministry of Education and Culture and individual municipalities have all initiated new projects to advance the pedagogical use of digital technology in learning. Soon after the common adoption of the term *Digi-leap*, the Ministry of Education and Culture financed a study called *Basic School in the Digital Age* to examine the progress of digitalization in schools. The study covered strategy work and management, the operating environment, pedagogical operating practices, digital competence, and related development and support. The study included a nationally representative survey of principals, teachers, and students in grades 2, 5, and 8; a test of teachers' and grade 9 students' digital competence; and interviews with principals, teachers, and students in 10 different schools during the years 2017, 2018, and 2019.

The survey platform (https://opeka.fi/fi), which is still operational, allows both individual schools and municipalities to compare their digital readiness to others along different dimensions.

The results of the survey indicate that the development of digitalization has progressed at very different paces in different schools and municipalities. As of 2019, most schools had digital strategies, but their deployment was still limited among the staff. Positive developments had taken place in digital operating practices and school cultures has become more open and communal regarding the use of ICT. Likewise, the use of digital resources in teaching had increased somewhat since the first cycle of the study. However, despite progress in teachers' self-assessment of their digital competence between 2017 and 2019, the actual test results showed that positive progress was limited to the time between the first cycles (2017–2018) after which the results remained unchanged. Researchers attributed the initial progress to an increase in well-organized continuing education, and school-based tutoring had also improved teachers' trust in their own digital skills. Somewhat surprisingly, even with increased use of digital devices in classrooms, no significant change was observed in the competence of students, which had been found poor at the baseline.

There was very little change in the use of digital devices as reported by either teachers or students. If anything, both groups reported a *decline* in the use of computers, but this was countered by a similar increase in the use of tablets or iPads. This might indicate a move from separate ICT classes to the use of personal devices in regular classes. This interpretation is supported by an increase in students' reported use of not only tablets but also their own smartphones in class for learning purposes.

A major incentive for increased digital learning was the gradual digitalization of the matriculation examination at the end of upper secondary school between 2016 and 2019. To prepare students for the examination, the use of digital devices and learning material increased in all subjects, a development that began slowly to exert pressure to "go digital" at the lower secondary level.

Finland's school closures related to the COVID-19 pandemic showed that at all grade levels, Finnish administrators, teachers and students were well prepared for digital remote learning, in the latter case often based on study habits already acquired in class (see Chapter 14).

Co-Teaching and Breaking the Boundaries of Traditional Classrooms

One more recent development in the Finnish basic school has been the shift to open the classrooms to teacher cooperation. There is no tradition of working teachers visiting each other's classrooms for observation, although observing more experienced teachers in the university or field schools is an important and valued part of pre-service teacher education. Teachers have, of course, always shared their views on the profession, but teaching itself has mainly taken place in the relative isolation of the classroom, between the teacher and his or her

students. As part of the special education reform of 2011 (see Chapter 11), however, a group of City of Helsinki basic schools introduced co-teaching in 2009 to help pave the way for inclusion practices, following a Canadian model (Ahtiainen et al. 2011). In this early phase, co-teaching referred mainly to collaboration of the classroom or subject teacher and a special education teacher in one class. After the NCC 2014's emphasis on flexible learning environments, however, the concept of co-teaching was expanded to include open learning environments where several classes are joined to study in a larger space under the tutelage of two or more teachers.

Today, almost all new school buildings in Finland include large *open learning environments*, which can gather up to a hundred students of the same grade level into the same space, maybe divided by curtains or loose partitions. The concept has been compared to open offices and criticized using much the same arguments. The critique has mainly centered on noise and the challenge large open spaces pose to students' concentration. To counter this, all the new schools also offer secluded cubicles for quiet work, but concern over the learning challenges this environment poses for weak students, in particular, has remained. Schools defend the large spaces by referring to the requirements of the NCC 2014, but in truth the NCC does not require such spaces to meet its call for learning environments that allow pedagogical flexibility and promote collaboration, participation and shared knowledge construction or the exploration of phenomena from different perspectives. Rather, the inspiration for the large open learning spaces seems to be new British and Danish schools and in the increasingly popular co-teaching arrangements. Some have also suggested that there are cost savings in organizing schools with larger classes.

Many of these large open spaces have been divided into more traditional classrooms with glass or more opaque partitions, though whether this has happened because of parent objections to the open learning environment or because teachers and students preferred traditional classrooms is not always clear. Even if most teachers do prefer smaller classrooms, they have also welcomed the increased collaboration and co-teaching that the open-plan arrangement has offered. The question is still unresolved, in any case, with very little research done yet on the impact of these open learning environments on either learning outcomes or the wellbeing of students and teachers.

It is interesting to consider the question of open learning environments within the fraught context of class size. In Finnish schools the average class size is only 18.9 students for grades 1–6 and 16.9 students for grades 7–9, well under the OECD average. Even so, class size has long been the number one complaint regarding the basic school and is regarded as the chief reason for teacher burn-out (see Chapter 12). These complaints have intensified since the special education reform of 2011, which brought students from smaller special education classes into regular classes and increased class size. The reform also brought teaching assistants and part-time

special education teachers into regular classes, contributing to co-teaching. Where many teachers may once have seen a class of 25 students as big, many now teach classes of up to a hundred students with two or three co-teachers and maybe some additional assistants (Helsingin Sanomat 2020a).

Promoting Wellbeing in School

Children's holistic growth has been central to Finnish education from the start (see Chapter 1) and is still apparent in the first paragraph of the NCC, which describes the goal of education as creating "favorable conditions for the pupils' growth, development and learning" (note that "growth" comes first). Likewise, in the chapter on values, the NCC gives equal weight to students' wellbeing and learning, noting that students "also need to feel that the community cares about their learning and wellbeing," (p. 15) and appears to understand wellbeing as a precondition for learning. Lately, however, the education community's concern for student wellbeing seems to have eclipsed even its concern for decreasing learning outcomes.

Student wellbeing entered education life officially in 1996 with the first survey of The Finnish Institute for Health and Welfare's (THL) School Health Promotion study (SHP). The large-scale study aims to monitor students' wellbeing, health and schoolwork with a biannual survey covering several grade-levels of students. In 2019, the study reached 300,000 students from grade 4 to upper secondary education. It also included views of the parents of the youngest group of 4th and 5th graders. Anne Konu and Matti Rimpelä presented in 2002 a conceptual model of wellbeing in schools that underlies the SHP, dividing the concept into four categories: school conditions, social relationships, means of self-fulfillment, and health status. The model, although not officially sanctioned by the education administration, has strongly influenced all later discussion of student wellbeing at school—even if research combining the three dimensions of health, wellbeing, and learning is still relatively limited. It should be noted that with the SHP, schools have much more accurate and nationally comparable data on students' health, wellbeing, and attitudes toward school than they have about their learning outcomes (see Chapters 7 and 9).

The emphasis on student wellbeing also affects discussion about the role of motivation in school. There has been a clear shift in the Finnish education community from an older understanding of motivation as both intrinsic and extrinsic (e.g., Ryan & Deci 2000) toward a newer conception of motivation as purely intrinsic. This, in turn, has led to an understanding of wellbeing as closely tied to intrinsic motivation while learning is tied, in a negative way, to extrinsic motivation like test scores and grades. Subsequently, recent reforms such as the introduction of the multidisciplinary modules have been justified by their tie to students' intrinsic motivation and, consequently, students' wellbeing.

This focus on motivation and wellbeing is also apparent in the latest Finnish reporting on international education studies. Perhaps because Finnish students' achievement on the cognitive portions of PISA is still high, even if decreasing, the education community here has paid more attention to their relatively weaker levels of school engagement and motivation revealed in the same studies. Of course, no one would want students not to feel happy and well at school. Recently, however, the tone of Finnish educational discussion has seemed to suggest a contradiction between student wellbeing and high educational standards or achievement.

While there is no doubt that young people's wellbeing is threatened today in a way it was not some 10 to twenty years ago, and that this malaise is also related to students' learning and school achievement, it has not been shown that lowering the expectations set for students at school would help. Also, as is well known from the OECD PISA and other international comparative studies, while the correlation between motivation and achievement is often negative across countries, within any single country the link tends to be positive, just as the theories behind the different affective constructs predict. What the school-related research often seems to overlook is that the diverse affective factors tend to be strongly correlated with each other and once any measurement for earlier ability or achievement is added into the models, the added value they bring to the picture is rather weak. If taken seriously, this might bring the discussion back to the relations among learning, extrinsic and intrinsic motivation, and wellbeing. Maybe the remedy needed to promote student wellbeing in school is, after all, not more integrative phenomena but a clearer emphasis on mastery of individual subjects. Already now, Finnish students' relatively weaker performance on the curriculum based TIMSS than on the mathematical literacy portion of PISA shows that their shortcomings might not be in the application of knowledge but in their depth of knowledge.

12

Support for Learning and Student Welfare

The Finnish basic school has been characterized by a strong Nordic ethos of educational equality—with a utopian goal of equal outcomes. This has led to a strong emphasis on support for weak learners and a hesitancy to even discuss providing strong students with opportunities to accelerate. Recently, however, some forms of differentiation such as selective classes and offering choice among schools have appeared, especially in the bigger cities. The emphasis on support for all has also led to notable and well-developed forms of multi-professionalism in Finnish basic education.

Perhaps reflecting the late introduction and expansion of compulsory education through a poor and sparsely populated country, equity has been paramount among the goals of Finnish education since the first Finnish-language schools were established in the 1860s. The ideal of all children reaching their full potential and becoming self-reliant and productive citizens of the new nation was central to discussions regarding the expansion of elementary schools across the country—even among the elite, Swedish-speaking adherents of the Fennoman movement. The same goal drove the adoption of the comprehensive school. Educators quickly grasped that without remedial teaching and special support, the first five years of the grammar school would be too demanding for the weaker students who had up to this point chosen the academically less demanding path from elementary to civic school. As a consequence, extra support was part of the agenda of comprehensive education from the beginning.

The Finnish education system recognizes two types of special education teachers: special education class teachers, who teach classes of exclusively special education students with no more than 10 students per class, and so-called part-time special needs education teachers who teach full-time but whose students receive special education only periodically or "part-time." The latter teach the students either in small groups or as co-teachers in regular classes. There is no difference in the training these two types of special education teachers receive. However, there are two ways to become a special education teacher: The majority of special education teachers are classroom teachers who return to university for further qualification in special education; a minority enter their pre-service education focused exclusively on a master's degree in special education.

Development of Special Education Since the 1970 Reform

Since the implementation of comprehensive school in Finland, a key component of educational equity has been the system for supporting the weakest learners (Graham & Jahnukainen 2011; Sabel et al. 2011). The support system can be interpreted as having been relatively effective, as in international comparisons the weakest Finnish students usually outperform their comparison groups in other countries (e.g., OECD 2013), whereas the differences between better performers have been much smaller. The support system consisted of general support, which was meant for anyone needing temporary help in learning, and special education, which required an official administrative decision based on a statement from either a school psychologist or a medical doctor (Graham & Jahnukainen 2011; Jahnukainen 2011; Vainikainen et al. 2015).

The Special Education Reform of 2010

The special education reform of 2010 was the first major reform in basic education since its adoption in the 1970s—or since the end of tracking in the lower secondary grades in 1985 (see Chapter 3). The background of the reform was two-fold: On the one hand, the number of students referred to special education or receiving partial support from special education teachers was growing, while on the other, Finland was seen to have been negligent in answering the international call for more inclusive education (Vainikainen et al. 2015). One explanation for the rise in the number of special education referrals was the additional financial resources directed to municipalities based on the number of students receiving special education: teachers concerned for weaker students may have been eager to secure more resources for them, and the teachers themselves may have struggled with the challenges of teaching increasingly heterogeneous classes. Consequently, by 2006, a full 8 percent of students had been referred to special education, half of whom were taught in segregated classes or special schools.

In 2004, educators from a group of 10 bigger cities began to openly express doubts regarding the arrangement of special education services at both the national and the local level. This discord culminated in a more formal collaboration, and the municipalities subsequently handed over an official report on the issue to the Ministry of Education, leading to the new strategy for special education in 2007, followed by related changes to the Basic Education Act, which were passed in Parliament in 2010 (Thuneberg et al. 2013). Although most Finns appreciate the reform's emphasis on inclusion, its implementation created considerable controversy among teachers. While the official discussion surrounding the reform and the white paper preceding the legislation stressed the individual support students would receive in class following implementation, amid the educational budget cuts in the aftermath of the 2008 recession, very little of this was realized. Accordingly, teachers, and the Teacher Union representing them, felt that the reform was more about saving funding than about students' right to inclusive education. The Act also led to the emergence of a new type of class in Finnish schools, as schools

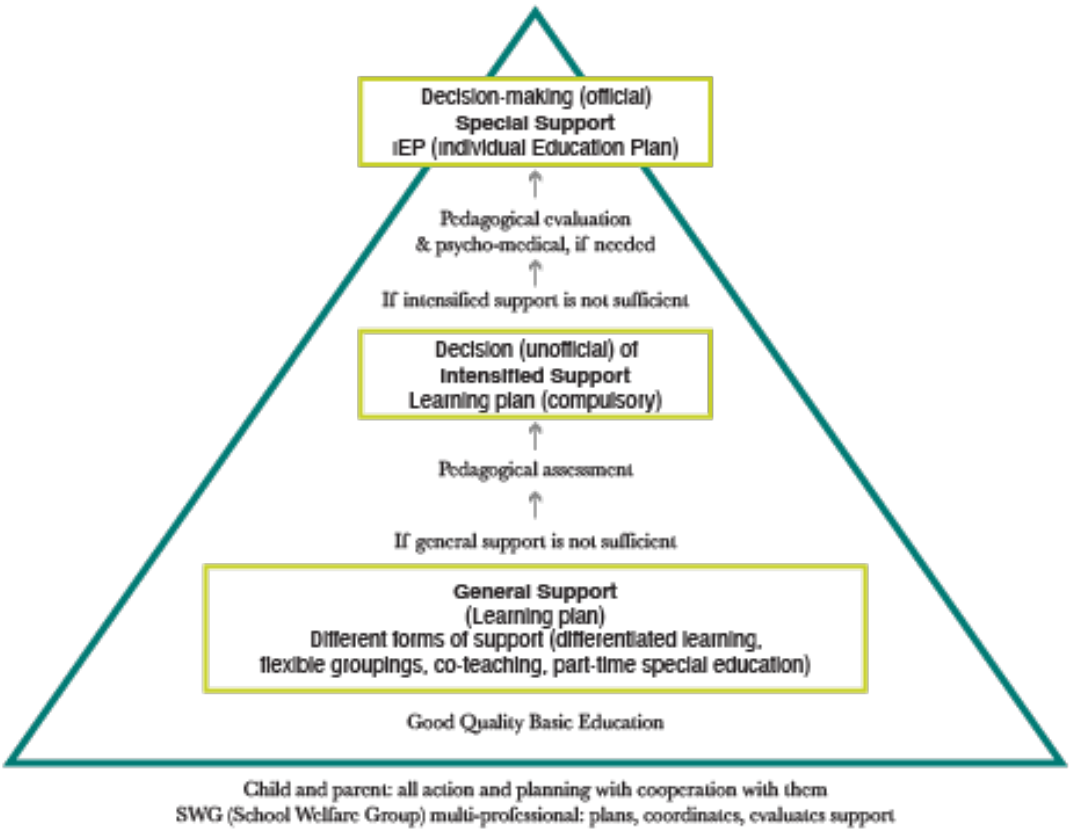
responded to the new requirements by using class size to allocate special education students to classes. Kupiainen and Hienonen (2016) found in their study of class size that most schools with more than two classes per grade level had one class that was smaller than the others serving all or most of the students receiving support.

The Three-Tier Support Model

The basic idea of the special education reform was to introduce a three-tiered support system that would provide general, intensified, or special support for students in need. The focus of the reform was conceptual as well as structural, with an emphasis on the idea of support as a continuum from general support for all (including, for example, remedial teaching) to special support for students for whom general or even intensified support was not sufficient. One key term was the *individual education plan* (IEP), to be created for all students receiving special support and, like the plan for intensified support, regularly reevaluated. The IEP has raised the criticism (familiar among educators) that instead of adding resources for students in reality the reform has just added paperwork (Ståhlberg et al. 2019). Although in concept the IEP sidelines the "same for all" principle of Finnish basic education, there is very little research on whether the goals of the IEPs differ from the common goals and criteria presented in the NCC. What we do know is that slightly over 40 percent of students receiving special support have an IEP with reduced learning standards. Arguments for the introduction of the new criteria for minimum proficiency (see Chapter 9) include the idea that a student falling short of the target could be transferred to the status of receiving special support, meaning the student receives an individual learning plan and thus is not being assessed according to the common criteria.

The triangle form of Figure 5 is adapted from international Response to Intervention or RTI-models but was not the foundation for the new model in Finland (Thuneberg et al. 2014). As in its original use, the diminishing number of students at the levels of intensifying support is supposed to reflect their actual share of the whole student body.

Figure 5. An Overview of the 3-tiered Model



Source: Thuneberg et al. 2013

The idea of the new support system is to offer support for every student by moving from one level to the next if the previous level has proven insufficient. The first tier, general support, should be provided immediately when a classroom or subject teacher (in most cases) raises concern over a student's progress. The first-tier interventions are usually tailored to the individual student and conducted by the student's own teacher or by a part-time special education teacher. The most common means of support are differentiation, remedial instruction, and part-time special education either as co-teaching or in a small group of students receiving a similar level of support (National Board of Education 2011; Thuneberg et al. 2013). The sufficiency of the support is evaluated through observations, screenings and discussions between the student, guardians, teachers, and school welfare professionals. If the general support received is found insufficient, a *pedagogical assessment* is conducted. The assessment is prepared by the student's teacher or teachers in collaboration with other professionals as indicated and in cooperation with the student's guardians, but the decision to implement is made in multi-professional collaboration including with representatives of the Student Welfare Group (see page 127). According to the assessment, an individual learning plan is created for the student, meaning the organization of intensified support. Intensified support comprises the same interventions as general support but with increased intensity,

and multiple types of interventions are typically implemented simultaneously. Most of the intensified support focuses on problems in one or more subjects but can also focus on problems in general school engagement. The effectiveness of intensified support is monitored systematically, with the interventions adjusted according to individual needs (Vainikainen et al. 2015).

If intensified support proves insufficient, a selection of professionals in consultation with the school's Social Welfare Group will conduct a wider *pedagogical evaluation*, including any psychological or medical statements. Based on this evaluation, the school can make an official decision to start special support, including the creation of an IEP. The transfer of a student to full-time special education, whether in a regular or special education class, always requires the official decision of special support. The methods of support remain largely the same throughout all three tiers but are applied with increasing intensity. According to a recent study using large-scale data from 369 classes in the 14 municipalities in the Helsinki metropolitan region, there was at least one student receiving intensified support in 45 percent of regular classes and at least one student receiving special support in at least 31 percent of regular classes (Hienonen 2020, 41). Another study with nationally representative data from lower secondary education indicated that there is at least one Tier 2 or Tier 3-support student in 65–80 percent of regular classes (Hienonen & Lintuvuori 2018).

Even if the tiered support model is built on the idea of students progressing from one level of support to the next, an official decision of special support can be made without the steps of general and intensified support. This can happen if it is deemed unlikely that the lighter means of support will suffice or if the student is transferring from lower levels of education with an existing status of special support (Vainikainen et al. 2015).

Tools for Support and Screening of Learning Difficulties

A key tenet of the 2010 special education reform was early detection of learning problems, whether related to students' academic progress or to behavioral factors affecting their learning or that of their classmates. Early detection requires early intervention and giving students appropriate levels of support. The practical tools developed for the three-tiered model comprise the pedagogical assessments and evaluations, as well as plans for the organization of learning for students receiving intensified or special support. These must be documented and regularly monitored. After the pedagogical assessment transitioning a student from general support to intensified support, all actions and interventions are documented in a *learning plan*. Likewise, before an official decision about special support, a pedagogical evaluation (more thorough than the assessment) is executed by the multi-professional team including the school psychologist and social worker, and an *individual plan of organization of learning* is created to serve as a basis for the organizing of support. Like all other documents related to the support system, this is prepared in collaboration with the student and his or her guardians.

Several types of screening methods are used in Finnish schools to identify support needs regarding learning or social and emotional challenges. The first and most obvious is teacher observation, which is effective if done systematically by making field notes. Yet, there are no clear guidelines for implementation nor ready-made forms to make the process consistent and straight-forward for teachers. Schools with sufficient resources might address teacher concern over a student by inviting a co-teacher (often a part-time special education teacher) to work as an extra observer during regular classroom time. Discussions with the student and his or her guardians are essential. While the exams used by teachers in class for summative assessment may offer some information about potential gaps in weak students' learning and progress, additional screening tools and tests implemented by a special education teacher or school psychologist are also needed. In some municipalities, screening tests in Finnish/Swedish (the language of instruction) and mathematics are used regularly at some grade levels in basic education. Especially widely used today is the somewhat outdated reading test ALLU (Lindeman 1998) to screen 2nd graders' technical reading and reading comprehension. The results could be valuable for organizing support in schools, classes, and for individual students, and in some municipalities the results are used to provide extra resources to schools according to the principle of positive discrimination. However, even if the screening were extended to all students, the results are not made public as they are only meant to serve educational purposes (Vainikainen et al. 2017). Moreover, while the ALLU test is the best known, municipalities and schools have the freedom to choose their own screening methods or to let their special education teachers choose their methods individually. Accordingly, there are no national data on which screening methods are most commonly used and whether the results help schools monitor students' progress from one grade level to the next. One of the few assessments on the implementation of the three-tiered model did find, however, that teachers' on-site observation and subsequent multi-professional decision-making out-performed the earlier strictly psycho-medical approaches to identifying students' learning and school-related problems (Vainikainen et al. 2017). One of the reasons behind the lack of certified screening and diagnostic tools is that they are not required for a student to begin special education; all that *is* required is consensus among that student's educators and guardians around the need for support. For research and inspection purposes, this lack of formal procedure is a problem, but one presumably perceived by schools as less grave than forgoing or delaying support for students.

Special Education at the Upper Secondary Level

Special education has for a long time been a prominent part of vocational education, as most students who receive support in basic school continue their studies in the vocational upper secondary school. In the academic upper secondary schools, by contrast, support only became an integral part of upper secondary education with passage of the new law in 2018. Before that, learning problems were not expected to surface in the academic schools, as it has traditionally been the choice of high-achieving students. The one exception to this is an official

diagnosis of dyslexia, for which accommodations were made in both daily studies and on the matriculation examination well before 2018.

Students with a low GPA at the end of basic education due to either learning problems or low school engagement who nonetheless wish to enter the academic track have traditionally made up a large part of the basic schools' auxiliary 10th grade, where they can spend an additional year trying to improve their grades. Since the new law of 2018, academic upper secondary schools have added support for learning as well as preparatory classes for immigrant background students. The reform can be expected to increase the share of immigrant background students not only in academic upper secondary schools but also later in higher education, a goal written into the FINEEC report by Kuukka and Metsämuuronen in 2016.

Multi-Professional Collaboration and the Student Welfare Group[18]

In the Finnish education system, student welfare refers to the work done with students in schools that is not related to teaching. Legislation defines student welfare as every student's right to the services of a psychologist, a social worker, a school nurse, and a medical doctor in addition to the support organized by the school staff, including all teachers and, in lower and upper secondary education, student counsellors. International analyses of Finnish education have identified student welfare as an important element in the Finnish system regarding individualized student services (Sabel et al. 2011). A school's permanent personnel are the main actors in its student welfare system, but any action can also include other professionals, most often from among the municipality's social and health or youth work sectors. Every school has a team known as the Student Welfare Group led by the school principal. The team meets regularly and is generally comprised of the principal, the involved student's teacher(s), the special education teacher, the school psychologist, the school nurse, and the school social worker, though the composition of the group may differ slightly according to the issue at hand (National Board of Education 2011; Thuneberg et al. 2013). Due to the diversity of schools regarding size, location, and students' need for support, there are differences in how often the student welfare professionals are present in schools (Saaristo & Kumpulainen 2014). The schools' resources regarding multi-professional personnel and collaboration depend mainly on local education policies and financial resources as well as the number of students. There has been ongoing but unresolved discussion about setting clear requirements for per student service resources, as the availability of school psychologists in particular varies considerably between schools and municipalities while students' mental problems have been on the rise.

[18] For the content of this chapter, we are indebted to Vainikainen et al. 2015.

In 2008 Finland launched a nationwide project to develop student support practices across the municipalities (Ahtiainen et al. 2011; Thuneberg et al. 2014). The principal survey showed that even in a well-structured national reform such as the one on student support, there were clear regional differences in how the new ideas were realized in practice, not only related to differences in students' needs but also to local resources. The new Pupil and Student Welfare Act, which took effect in 2014 and mandated all schools to have qualified social worker and school psychologist services available, was expected to smooth out these inequities (Saaristo & Kumpulainen 2014). As it turned out, however, the situation improved before 2014. While from 2008–2009, a social worker was available in just 76 percent of schools, by 2011–2013 that figure had jumped to 91 percent of schools; for school psychologists, the increase was from 71 to 84 percent over the same time period (Wiss et al. 2014). At the time of the study, multi-professional teamwork was already a regular feature of most schools in bigger cities and in Southern Finland, which influenced principals' expectations regarding its quality. In smaller schools and in the rural regions, the path was less smooth, requiring a more systematic approach to teamwork around student support (Vainikainen et al. 2015).

Today, the multi-professional Student Welfare Group is seen as a central element in guaranteeing educational support for every student and is, hence, mandatory in every school. The reasoning is that municipal social workers and other relevant authorities are too distant from everyday schoolwork, while the students' own teachers are too close to their students' needs and problems to see their relative weight in relation to the school's overall resources. The group typically meets bi-weekly, discussing issues related to individual students, groups of students or whole classes on the request of their teachers, making plans to resolve the situation, organizing interventions and deciding on acts for follow-up.

Supports for Advanced Students

Despite the egalitarian ethos of Finnish education and the strong emphasis on support for students with learning difficulties, there have also been efforts to provide extra challenges for more advanced students. Mainly this happens as part of daily schoolwork in the form of differentiation, but some municipalities and schools also practice elective class allocation based on tested (or otherwise attested) aptitude for a specific subject (see Chapter 10). Subject-specific exams or competitions are also organized annually by some subject-teacher unions. These are not mandatory, but teachers can either use them to support all students' interest in the subject or recommend them exclusively to the most advanced students as an extra challenge exceeding the requirements of the curriculum.

The best known and most challenging among these competitions are those organized by the Union of Teachers of History and Social Studies (HYOL) and the Union of Mathematics Teachers (MAOL). Both unions organize two-phase competitions for 9th graders and for upper secondary students. Teachers can use the first phase of

these as a part of their regular teaching while the second phase collects the best performing students from across the country to a final. The grade 9 HYOL competition centers on economy, which is the focus of the 9th grade syllabus in these two subjects. For upper secondary students, the HYOL offers two competitions, one in economy and one in law. The MAOL competition tasks clearly exceed the math curriculum at both levels, and (at least some of) the finalists are invited to participate in preparation for the Mathematics Olympics. For both competitions (HYOL & MAOL), the best competitors are offered admission to one or several universities at the respective faculty.

13

Teachers and School Leadership as the Backbone of Learning

Since Finland's first success in the OECD PISA studies, highly qualified teachers have been regarded as the number one reason for Finnish students' high achievement. Teaching has long been regarded as a desirable profession for university graduates. But this is slowly changing, as other professions compete with teaching, and as the work teachers perform becomes ever more complex.

Even though most Finnish students participating in PISA are 9th graders who have been studying for the last three years under subject teachers, the world's attention—and the Finnish researchers trying to explain the Finnish "PISA miracle"—have focused on the classroom teachers who teach students in primary grades. Likewise, the focus of this chapter is on the classroom teacher. But we should note that subject teachers do get similar pedagogical training as classroom teachers, including a rich practicum experience.

Novice-Teacher Mentoring at School

There are several studies showing that irrespective of national teacher education systems and practices, new teachers are susceptible to "reality shock" when entering their first job. This has been the case also in Finland. This sense of being unprepared among new teachers escalated after the 2011 reform of special education, when most students with learning or behavioral difficulties were moved from special classes into regular classes. New teachers also felt unprepared for home-school collaboration, which is less emphasized at the pre-service phase. To respond to their concerns, the Center for Continuous Education at the University of Helsinki launched a program in 2013 for induction mentoring in Finnish schools in collaboration with the New Teacher Centre (NTC) in Santa Cruz, California, the FNBE and the Finnish Parents' Union.

In many Western countries, although not the United States, the induction phase of teacher education is mandatory and may even form a part of the licensing process. In Finland, however, the concept was relatively new at the time of the first OECD TALIS (Teaching and Learning International Survey) survey (OECD 2009), in which Finland did not participate but was included in the secondary analyses of the European data

(Scheerens 2009). In TALIS, teacher education was seen as a continuum of initial education, early career support and further professional development. To respond to some of the problems revealed by TALIS, in 2010 the EU Commission published a handbook to support the development of induction programs for beginning teachers as part of the first phase of this three-phase continuum of professional development (EC 2010). Early support was seen as especially important in countries where teacher turnover due to "reality shock" is high at the early stages. Based on these documents and the collaboration with the NCT, a new program for teacher mentoring was presented and, at the same time, a Finnish initiative for training mentors was launched (Heikkinen, Jokinen & Tynjälä 2010).

At the time, perhaps related to the reform of special education, an increase in the share of students with immigrant background, and the growing impact of varied social problems on schools and students' learning, there were signs that especially young teachers were beginning to be disillusioned with the work. This began to raise a wider concern that the desirability of Finnish teacher education might be declining. In that respect, the international impetus for early career support came at a good time to enrich Finnish teacher education.

In a survey of early career teachers, the respondents found entering the school community relatively easy but felt most in need of support in responding to situations such as bullying, tasks related to student welfare, differentiation of instruction, administrative tasks, diagnostic and summative assessment, and collaboration with guardians. By contrast, their confidence in their content knowledge and ability to plan and carry out lesson plans was relatively positive. Despite Finland's quite uniform teacher education system and well-functioning schools, there was considerable variation in the early-career teachers' responses. Many respondents also requested mentoring by a more experienced teacher to facilitate their entrance into the school community and guide them through the range of tasks they had not anticipated and felt unequipped to handle (Niemi & Siljander 2013). Teachers raised the very same concerns in the 2020 Erasmus+ Key Action study covering four European countries (Harju 2020), indicating that not much changed in the field in the seven intervening years.

In an effort to address the lack of early-career support in Finnish schools, however, the Finnish Work Environmental Fund launched a national network in the early 2000s, later funded as a priority project by the government, for developing and disseminating a peer-group mentoring model, known by the Finnish acronym VERME, to support mentoring at all levels of education (see VERME 2, no date). Unlike traditional mentoring where the more experienced partner is understood as the "giving" partner and the new teacher as the receiving one, peer-group mentoring aims at an equal-footing collaboration where a group of four to ten teachers at different stages of their careers share their experiences, challenges, and mutual support with each other in all directions. Yet, peer-group mentoring is not just a casual, collegial collaboration; VERME 2 has trained already over 800 mentors to establish and lead peer-group mentoring groups in their own municipalities and schools.

The VERME groups meet regularly across the school year and have become a central tool for both initial and in-service education. Moreover, VERME has expanded to offer highly valued peer-group mentoring across schools for teachers of the same subject as well as principals, both of whom might lack colleagues in their respective schools.

Teacher In-Service Education

The parties responsible for the in-service education of teaching staff are the teachers themselves and their employers, most commonly municipalities. The employer is responsible for education based on the collective agreement for public servants; the minimum duration of this education is three working days outside of school days per academic year. In addition to the employer, the Ministry of Education and Culture also supports the in-service education of teachers.

Every teacher has an obligation to participate in three days of in-service training per year. Quite often two days are used in the autumn for planning the school year, and the third day at the end of spring for planning the next school year. In other words, even though they are counted as a part of teacher in-service training, the three obligatory days are nationally widely used for routine purposes unrelated to training. TALIS 2013 and 2018 results revealed that in Finland, approximately 20 percent of teachers never participated in other kinds of in-service training than the planning days described above.

The objective of state financed in-service education is to provide principals and teachers with equal opportunities to develop their competence. State financed in-service trainings are organized either by the EDUFI (long-term) or by Regional State Administrative Agencies (short-term). The in-service training objectives or contents are often linked either to the planning and implementing of the NCC locally or to some other politically important themes such as to promote early language teaching, inclusion, equality in literacy skills or other. Annually approximately 23,000 teachers (roughly one in three) participate in government-funded in-service training (at a cost of 10 million euros per year). Teachers can choose whether they participate in the short-term development programs (generally one to two days) or in long-term development programs, usually worth two to five ECTS credits.

Short-term in-service trainings are also funded and operated by schools; by municipalities (especially if offered for teachers from all schools, e.g., positive pedagogy); by regions (e.g., for the local implementation of the new NCC); or nationwide (e.g., for the reform of the assessment guidelines and criteria). In-service training providers can be diverse university faculties (for the respective subject teachers), teacher-education units, pedagogical associations, publishing houses (especially regarding new textbooks after a new NCC), private or municipally owned

companies related to learning materials, or non-profit organizations (e.g., the organizers of subject-specific competitions).

Pedagogical Change through Professional Learning

In 2019 the Ministry of Education and Culture launched the development program *Right to Learn—An Equal Start on the Path of Education* (MINEDU 2020a, 2020b). The two-year program, which began in 2020, is the current government's key initiative for the development of Early Childhood Education and Care and Basic Education. The program is focused around strengthening neighborhood schools. A central goal is cutting school group sizes, which, although currently close to the OECD mean on average, vary considerably across (and even within) schools and are a constant source of teacher complaints. Other central goals are improving the quality of teaching through more systematic in-service training for teachers, principals and other education staff, and the implementation of a national management development program.

In autumn 2016, Finland created the *tutor teacher program* to support implementation of the renewed curriculum. The objective of the program was to have tutor teachers in all 2,500 comprehensive schools in Finland to embrace new pedagogical approaches and promote the digitalization of teaching. The tutor teacher activities have been supported through discretionary government transfers, available to education providers via application to the Finnish National Agency for Education. Between 2016 and 2018 23 million euros went toward supporting the training and development of tutor teachers as well as implementing tutor teaching and peer support in practice.

According to the tutor teacher survey of the Finnish National Agency for Education 2017, over 95 percent of education providers projected that their tutor teacher activities would continue in the future even without national funding. In addition to one-on-one tutoring, the tutor teachers provided training to groups of teachers. Participation was usually voluntary, but many respondents noted that their school had encouraged weaker teachers or those with outdated skills to participate. Some also mentioned encountering some resistance to change among teachers and not being able to get all teachers involved (Finnish National Agency for Education 2017).

Overall, the assessments of the future of the tutor teacher activities are highly positive, possibly due to their beneficial impacts and reasonable operating costs. Moreover, many survey respondents noted that, in the future, it will be possible to carry out effective tutor teacher activities with a smaller budget than at the launching stage as tutor teachers have already been trained, equipment and software has been procured, and the new operating culture has already been established. Nonetheless, many of the open-ended responses emphasized that despite such positive prospects, education providers expressed uncertainty around how they would self-finance tutor

teacher activities, meaning that the discretionary government transfers have a real impact on the extent to which the program is implemented (Finnish National Agency for Education 2017).

TALIS 2018 as a Window to Finnish Teachers' Professional Development

In the OECD TALIS 2018 survey (OECD 2019), 87 percent of Finnish teachers reported having been instructed on subject content, pedagogy, and classroom practice in their pre-service education, as compared to the average of 79 percent of the participating OECD countries. Moreover, 57 percent of the Finnish teachers reported having participated in formal or informal induction when joining their current school as compared to the mean of 42 percent among OECD countries. Yet while school principals across the OECD generally considered mentoring to be important for teachers' work and students' performance and an average of 22 percent of novice teachers (up to 5 years of experience) had an assigned mentor, in Finland, the average was only 10 percent.

On average across the OECD, school leaders usually had attained a higher level of education than teachers had but only half of them (54 percent) had completed a training course or program for principals before taking up their position. In Finland, however, 88 percent of school leaders had completed a program or course in school administration or training for principals, and 48 percent had completed an instructional leadership training program or course (OECD average 54 percent), before taking up their position as principal.

Taking part in some form of in-service training is common among teachers and principals in both Finland and other OECD countries, with 93 percent of Finnish teachers (OECD average 94 percent) and 99 percent of Finnish principals (OECD average 99 percent) having attended at least one professional development activity in the year prior to the survey. Attending courses and seminars was one of the most popular types of professional development for teachers across the OECD. In Finland, 68 percent of teachers participate in this kind of training, while 14 percent participate in training based on peer learning and coaching. It is noteworthy that teachers across the OECD reported professional development based on collaboration and collaborative approaches to teaching as among the most useful.

Teachers in Finland appeared satisfied with the training they received, with 79 percent reporting that the training had had a positive impact on their teaching practice, a slightly lower share than the OECD average (82 percent). Teachers reporting participation in such effective training tended to display higher levels of (self-appraised) self-efficacy and job satisfaction.

Some areas of professional development were still felt to be lacking. Across the OECD, the developing of advanced ICT skills was one area in which teachers said that they would need more training. Likewise, teachers felt their competence to be relatively weaker in teaching in multicultural or multilingual settings and in teaching students with special needs. Among these three areas, however, maybe due to the recent emphasis on in-service

training related to the reform of student support, Finnish teachers expressed the highest need for training in the pedagogical use of ICT. However, as the COVID-19 pandemic in spring 2020 showed, Finnish teachers managed the switch to digital remote learning with greater skill than they might have predicted two years earlier.

School Principals

Finland has a long tradition of basic school principals emerging from among the school's teaching staff. The principal's job was seen as chiefly administrative, with tasks following from municipal or national regulations. Perhaps due to this role of "civil-servant," principals were rarely mentioned when looking for factors that might have contributed to Finnish students' success in PISA (e.g., Taipale 2015). In fact, school principal has only become a clearly distinguished profession with its own professional requirements since the 1990s. As in most European countries, Finland's formal qualifications for principals still include teaching experience at the same level of the desired principal license (primary or secondary). In addition, since 1998, principals are required to have a certificate of formal studies in educational administration offered either by the EDUFI or a university.

In most municipalities, the principal's pedagogical leadership includes the hiring of substitute teachers and playing an active role in teacher recruitment, although the employment contracts of permanent teacher positions are made with the municipal education authority. In addition to issues regarding personnel, principals' tasks include organizing of teaching and learning: compiling and updating the school curriculum and the annual plans regarding teaching and other activities, and supporting competence-development across the school, including staff wellbeing and teachers' access to in-service education. The principals' duties also include both general and budgetary administration as well as issues related to safety. The structure of school administration is guided by municipal regulations, with especially the bigger municipalities using a two-tier model of school and district leaders. The tasks of a principal differ among schools, with the principals in smaller schools often serving as both principal and teacher.

Trust seems to be the crux of Finnish school leadership, as this talk at the international ENIRDELM conference on school leadership in 2014 suggests:

"In this article, we will examine trust in educational leadership. Special interest will be given to the opportunities pedagogical leadership offers to educational leadership. Another central scope is that of coaching leadership which appears to support the Finnish approach for pedagogical leadership. Pedagogical leadership has changed Finnish educational leadership significantly and people have started to give up their old leadership practices. The new practices are constructed on leadership based on the principles of so-called broad pedagogical leadership. As with other approaches of leadership, trust seems to remain as an essential challenge for successful leadership also concerning educational leadership." (Pulkkinenet et al. 2015, 35)

Pedagogical versus administrative leadership for principals is even more important today than it was in the above-cited talk (Holappa et al. 2021). In 2012, the FNBE nominated a working group to reform the job description for school principals. Along with increased responsibilities regarding personnel and financial management and new education requirements, the job description presented distributed or shared leadership as a key constituent of true pedagogical leadership (FNBE 2013). Accordingly, distributed leadership in the form of a relatively permanent leadership team comprising the principal, a possible vice principal and teacher representatives, or else a more flexible structure reflecting the issues in hand, seems to be used most commonly in schools. In a recent survey of principals in one of the bigger metropolitan municipalities, however, most principals saw distributed leadership as the delegation of predetermined tasks rather than a true, ongoing interaction among school leaders and other actors (Lahtero, Lång & Alava 2017).

Today, the Finnish principal is understood to have a pivotal role in the forming of the school's learning environment for both teachers and students (Ahtiainen et al. 2019; Dinham 2016). Even if the principal might not have a direct effect on learning outcomes, he or she can have an indirect effect by supporting teachers' work and its development and by active participation in its implementation. Maybe due to the practically sacrosanct autonomy of teachers, however, actions such as principals' active involvement in teaching by observation is rare in Finnish schools.

PART III

THE FUTURE OF THE SYSTEM

In Part III, we will examine the challenges facing Finland's education system in the coming decades, reflect on the system's ability to meet those challenges, and discuss the Finnish Ministry of Education and Culture Strategy 2030.

14

Challenges and Proposed Solutions for Finnish Education

The declining learning outcomes and widening performance gaps between schools and among students from different backgrounds, apparent on both international and national assessments, are slowly changing the national perception of Finnish education, which had long basked in the first PISA results. Critics have called attention to issues of student and teacher wellbeing, lack of data on student achievement, and rising dropout rates in vocational education. Finland's current plans are future-focused, aiming to promote lifelong learning with new study pathways as well as an emphasis on meta-skills and on using digital technology to enhance learning.

Some Key Strengths and Challenges of Finnish Education [19]

The Finnish education system got a strong boost from the success of its students on the OECD PISA-studies, starting with the first PISA study in 2000 (e.g., Sahlberg 2011a). Finland's respect for its teachers is understood to have been and to remain a central part of this success story, even if it was not much stressed in the first Finnish PISA reports (e.g., Välijärvi & Linnakylä 2002). Instead, the adoption in the 1970s of the comprehensive school with its stress on equity and a common curriculum in un-tracked classes, reinforced by extra support for the weakest students, was presented from the beginning as the most decisive explanation for Finnish success (e.g., Chung 2015; Kupiainen et al. 2009; Sahlberg 2011). Most basic schools were municipally run; the few grammar schools to remain "private" were incorporated into the municipal school networks.

The Basic Education Reform was closely linked with a reform in teacher education during the same period. The status (and presumed standards) of classroom teachers rose with the 1977 decision to transfer all teacher education to universities. The move reflected an understanding of the scaled-up requirements for classroom teachers, who were now expected to teach the syllabus of the first two years of the former grammar school, as

[19] The text is based on a discussion with University Lecturer Jari Salminen in October 2020. We are grateful for his insights, which nicely draw together many of the issues presented in the previous chapters of this report.

well as for subject teachers, who were now to teach the whole age cohort instead of just selected grammar school students (see Chapter 5). It was a purely by chance, however, that the intended bachelor's-level teacher pre-service education became the master's level program due to a simultaneous reform of all university programs that made most studies master's level. One result, according to Jari Salminen and colleagues, is that teacher pre-service training has become more theoretical over the past twenty years, with less connection to actual school life, including a decline by two-thirds in the number of practice lessons teachers undertake (Säntti et al. 2014). Before teachers educated in the new more theoretical university-level pre-service programs even started to teach, large-scale in-service training prepared existing classroom and subject teachers for the challenges of the new comprehensive school. One might argue that the students in the late 1900s and early 2000s—the ones who scored so well on PISA—were the ones with the best-ever educated teachers in Finland.

Salminen, a renowned education historian at the University of Helsinki, believes that the basic school lost many of the strong practices of the old elementary and grammar schools, but that this loss has only become clear over time and with the receding share of teachers experienced in both systems. He suggests the declining results of the past decade are mainly due to a decline in systematic teaching. He sees the NCC 2014 as having lower standards, less rigor and less clearly specified goals than the previous curriculum. Salminen questions the weight given to transversal skills when their relation to subject-specific competence is not spelled out.

More broadly, Salminen points to Finns' general trust in their education system and to the outgrowth of that trust, teacher autonomy, as another of the system's challenges—fully (and perhaps ironically) aware that these have long been perceived as the cornerstones of Finnish PISA success and the popularity of the teaching profession. Given some of the current challenges facing the Finnish basic school—low achievement of boys, the lack of clear standards, concern for student wellbeing overshadowing a focus on learning, incompatibility of assessment, inclusion—Salminen wonders if trust may begin (or may have already begun) to erode. A similar point may have been reached toward the end of the 1990s, when it was suggested that "PISA saved the Finnish Basic School" (e.g., Studio55 2015). Changes in the basic school in the 1990s, including allowing parents some choice among schools, decentralization of educational governance, the liberal NCC of 1994, and the introduction of selective classes (see Chapter 11) could also be seen as efforts to placate dissatisfied parents (Kantasalmi & Kupiainen, submitted).

When teacher education transitioned to the university and classroom teachers came newly equipped with advanced degrees, guardians and other education stakeholders felt increased trust toward the school in general. Today, however, parents are more aware of the diverse challenges facing schools, such as increasing numbers of students with home languages other than Finnish, the increasing inclusion of students with learning difficulties or behavioral problems into regular classes following the 2011 special education reform, and growing teacher

turnover in low-SES neighborhood schools. There is also a growing share of parents with tertiary degrees in fields with more demanding intakes or better salaries than classroom teachers which has shifted the perception of the profession's status. Principals report more parents, especially those in affluent neighborhoods, making demands regarding their child's advancement and treatment in school.

The current challenges of the Finnish basic school can be seen as just one more step in the long tradition of changes due to the changing context of schooling. In the 1970s, the comprehensive school allowed the whole age cohort to follow teaching that had earlier been restricted only to a selected minority, including the learning of the other national language, foreign languages, and more demanding syllabi in the other subjects. Today's challenge is to include all learners—those with learning difficulties as well as students of immigrant background—in the same classes and schools. Due to a range of historical and geo-political reasons, the latter is a very diverse group comprising recent refugees as well as students of Russian or Estonian origin whose social background does not differ from that of their Finnish peers. Yet, on the PISA 2015, the first time the share of Finnish students of immigrant background was large enough for relevant international comparison, it came as something of a shock to learn that Finland showed the largest difference between native and immigrant-background students—particularly as Finland was otherwise known for the relatively small impact of students' home background on their PISA performance. As many students arrive in Finland already of school age, schools provide preparatory classes where the emphasis is on reaching academic proficiency in Finnish/Swedish and, when possible, offer teaching also in the students' native tongue. After that, most students of immigrant background (even second-generation students) continue to study the language of instruction as a second language.

Salminen suggests that Finland faces three challenges for the future:

1. How can Finland develop its education system further with fewer financial resources?
2. How can Finland effectively integrate new educational elements such as digitalization, phenomena-based learning, and assessment practices into its learning system?
3. How can Finland address weaker readiness for teaching of novice teachers?

Some of these we have discussed in more depth in the previous chapters. In addition to these purely educational challenges, Salminen emphasizes the problems that spill over into schools from the outside society, such as increasing rates of depression and anxiety among children, which schools are often unequipped to solve or often even to alleviate. In addition, as school must constantly compete with numerous other important and interesting sources of entertainment, information, and affirmation in the lives of young people, it is not difficult to see that schooling as an enlightenment project may be especially hard hit. While the traditional trust in educational equality is losing credibility with the rising impact of students' home background on their educational attainment, the comprehensive school with its low level of competitiveness, once seen as an asset, might prove an

obstacle, as schools begin to seem inadequately challenging for some while too demanding or uninteresting for others. It remains to be seen what answers to these challenges the extension of compulsory education will bring.

Overall, Finland today is clearly facing quite a different landscape in education than it was twenty years ago, at the height of its first PISA success, or fifty years ago, as the new comprehensive school of the 1970s made its way across the country. One challenge that Salminen did not explicitly mention is the lack of adequate national data on learning outcomes from which to draw a reliable picture of the development of students' proficiency. International data from the OECD and the IEA clearly indicate a decline in the relative and even absolute level of Finnish students' attainment during the past 10 or more years. Due to the economic and societal developments of the 2000s, education can no longer be viewed as a clear path for social advancement in Finland, as it had been through the latter decades of the twentieth century. Consequently, there is no reason to believe that current trends can be stopped or reversed easily, and Salminen's doubts are persuasive regarding the power of the latest NCC reforms to turn the tide.

Finland Looking Forward: The Education and Culture Strategy 2030

While in the mid to late 1900s educational strategy and reform work was largely executed in parliamentary committees (see Chapter 3), today the work is primarily done by the Ministry of Education and Culture. The latest step has been the Education and Culture Strategy 2030, which lays out a plan for the Ministry and its agencies over several future government terms. This long-term planning should not obscure that in Finland, with its strong tradition of administrative stability, each Minister of Education tends to leave his or her mark on the education scene. The current Minister of Education, Li Anderson (the Left Alliance), played a key role in the rapid adoption of the law extending compulsory education to include upper secondary education; her predecessor, Sanni Grahn-Laasonen (the conservative Coalition Party), reformed the law on early education; advanced teaching of the first foreign language to grade 1; and helped put in place the new law on general upper secondary education, the reform of vocational education and training, the reform of student selection to tertiary education, and the vision for higher education and research 2030.

The public Education and Culture Strategy is very general in nature, making it difficult to predict its actual impact on the challenges presented above. The most concrete and important part has so far been the extension of compulsory education, which passed Parliament in December 2020 and was implemented in school year 2021–2022.

The Strategy (MINEDU 2019b) sets three impact objectives and their priorities (see Table 5, next page).

Table 5 Education and Culture Strategy 2030: Three Impact Objectives and Priorities

Objective	Measures to be taken to achieve the objective
Enabling better skills, knowledge, and competence for all	Equitable educational and cultural rights As many children as possible participate in early childhood education and care High-standard early childhood education and care Higher level of competence and education for the whole population Continuous learning for everyone
Taking creative, inquiry-based, and responsible action that renews society	Arts and science, early childhood care, education, youth work and sports foster an inquiry-based, creative, responsible, and international world view. The principles of sustainable development are observed in boosting economic growth, developments in working life and the vitality of communities. More robust conditions for research, development, and innovation A mix of tools for creating, producing, and leveraging arts and culture and to protect our diverse cultural heritage
Ensuring equal opportunities for a meaningful life	Active citizenship and an active way of life become more prevalent. More people engaged in sports, arts, and culture. Children and young people have their voice heard in society. Greater shared responsibility, inclusion, transparency, and sense of community.

Despite the common understanding of education as a key investment in the future, the Strategy 2030's broadened focus on wellbeing, culture and social services raises questions about the centrality of education. This question is especially timely today as the ongoing national reform of the sector of social and health services will cause education to become the largest public service to remain under municipal governance.

Government Future Report, Government Program and Educational Policy Report

The Strategy 2030 built on the Government Future Report of 2018 which identified the following goals for education in the period from 2019 to 2023:

- **Continuous learning and Finland's need for a high-quality model for lifelong learning** for the entire population. The current education system is insufficient to organize continuous learning

effectively. Its predominant idea is still to educate children and young people through school into working life. Finland needs a reform for continuous learning, which can steer education across the whole population and support changes in work much more systematically than at present. (Government Program 2019, 39)

- **The teaching of meta-skills at all levels of education** and the provision of lifelong learning to as many people as possible. In the future, the accrual and learning of skills must be seen clearly as an endeavor also for communities and enterprises: the possibly shorter education periods emphasize learning during one's career. As with time and location for learning, more attention shall be paid also to environments outside of educational institutions, including leisure time. (Government Program 2019, 12)
- **New types of study paths and qualifications** provided by educational institutions, new forms of continuing education in vocational schools, higher education institutions and the existing liberal adult education institutions, as well as digital learning environments and new ways to certify skills learned at educational institutions and acquired through practice are needed. (Government Program 2019, 31)
- **Lifelong learning will be broadly available** to students and adult learners with different needs and life situations. The Ministry of Education and Culture has launched reforms ranging from early childhood education to higher education to be realized or at least put in motion until the next parliamentary election in 2023**.** These include, for example, the *New Comprehensive School* (*#uuttakoulua*) program launched in 2016, the new Upper Secondary School Act and the vocational education reform, both of which passed into force in 2018, and the Right to Learn programs for ECEC and basic education for years 2020–2022 (MINEDU 2020a, 2020b). The goal of the reforms is to make education better able to respond to the rapidly evolving needs of individuals and businesses, and to advance the development of general skills and understanding, for example through cross-curricular studies and closer cooperation between lower and higher education institutions. The implementation of the Vision 2030 for Higher Education and Research, developed in 2018, laid out goals of increasing to more than 50 the percent of 25- to 34-year-olds with a tertiary degree and to support changes to enable continuous learning in higher education institutions. (Government Report 2019, 31)
- **Updating digital skills is critical for all population groups**. In all education, more weight should be put on the skills required for the Era of Artificial Intelligence, such as communication and social skills, and creative cognitive skills. In addition, education and training must offer a comprehensive set of studies for developing basic mathematical skills, which are critical for strengthening young people's digital skills. (Government Report 2019, 33.)

Following the Strategy 2030 and the Government Report, the current Government Program of Prime Minister Sanna Marin (inherited from her predecessor Prime Minister Antti Rinne) was made public in 2019. The task of

the Government Program is to create and give the guidelines, to concretize the Government Plan and to help its implementation. The role of the Ministry of Education is to follow the Government Program, which is a policy roadmap for the period 2019–2023. In the current Government Program, education and training are seen to provide the best safeguard against exclusion and lack of life prospects. The current situation is described in the program as follows:

An equal society seeks to provide opportunities for every citizen to study to their full potential. By the same token, we hold learning and educational achievement in high regard. Education and culture are an important part of our value system and are considered to be a means of guaranteeing individual freedom.

We have a reputation for having created a top-performing system of comprehensive school education. However, inequality, exclusion and differences in learning outcomes are beginning to threaten the Finnish success story. Those born in the 1970s are likely to be the age cohort with the highest level of education in Finland, leaving all others behind. What is more, we have not been able to keep up with the trend towards more international systems of education in our increasingly globalized world.

Regional, socio-economic and gender disparities and the correlation between the level of parental education and the performance of children have all become more noticeable in learning and educational achievement. We also have marked gender segregation of education and work. The educational achievement and skills of first and second-generation immigrants, people with disabilities and other groups in a vulnerable position lag those of the rest of the population. Studies indicate that commitment to education during the early years has a major impact on educational achievement later in life. In Finland, the participation rate in early childhood education and care lags far behind that of the other Nordic countries. Meanwhile, problems with children's and young people's ability to cope and mental health have increased to an alarming extent.

Despite an upper secondary qualification having been recognized as the minimum level of education for anybody to find work and participate in a modern society, 16 percent of the age cohort fails to complete this educational level. While the vocational education and training reform has rightly sought to increase workplace learning, so far it appears to have failed to deliver the desired skills.[20]

From the description of the current situation, three main objectives and a set of different measures to achieve them arise, concerning pre-primary, general basic and upper secondary education, and vocational education and

[20] See https://valtioneuvosto.fi/en/marin/government-programme/finland-that-promotes-competence-education-culture-and-innovation

training. As can be seen, some of the measures are related to the financing of the education sector, some are linked to amending or improving legislation, while some require further clarification and/or development programs that would give more information where needed.

In the Government Program, there is a plethora of measures for improving pre-primary, general and vocational education. The three objectives below—and the measures seen as necessary for their implementation—are the ones central for the development of the education system.

1. **The level of education and competence across the population will rise at all levels of education, differences in learning outcomes will decrease, and educational equality will increase.** Many of the respective measures had been implemented by the end of 2020, for instance action plans for quality and equality in comprehensive school education as well as for securing equal opportunities for pursuing individual learning pathways through funding for positive discrimination, encouraging more flexible teaching and providing adequate support. Likewise, a pilot for two-year pre-primary education started in 105 municipalities at the beginning of October 2020. The objective of the pilot was to advocate the learning of basic skills during the early years by reconfiguring pre-primary education and the first two years of primary school into a more close-knit system that would allow children to move flexibly to the next level after they have acquired the needed skills and competence.

The most ambitious project in the education sector was the December 2020 extension of compulsory education to include the upper secondary level, thus raising the minimum age to exit school to 18 years (unless the student achieves the upper secondary certificate earlier). In the Government Program, it was stated that having completed comprehensive school, every student gains an upper secondary qualification. As measures to accomplish this, the program listed the need to ensure the capacity of comprehensive schools to offer adequate student guidance and welfare services, along with the skills and competence needed for successfully completing upper secondary education.

As we have mentioned already, the extension of compulsory education did lead to vocal political opposition, and its rapid passage from Government Program proposal to law was seen by many as an unprecedented political maneuver. The arguments against the proposal were partially due to different views on the goals of the reform. As almost all students today already enter upper secondary education (which is free except for learning materials), many believed it would be better to concentrate the funds intended for the reform on dropout and NEET (Not in Employment, Education or Training) prevention by strengthening special education in basic school and at the upper secondary level. Partially, however, the political controversy echoes the discussion around the comprehensive school reform of the 1970s and the debate between those supporting a universal

education policy versus those in favor of more individualistic policies, including greater choice concerning their children's education.

2. **The wellbeing of children and young people will be secured.** In pre-primary, basic and upper secondary education, this means improving student welfare services so that all children and young people receive the support they need. Likewise, it means further development of the three-tier model in early childhood education and care, and the strengthening of three-tier support in comprehensive schools by increasing the resources for collaborative teaching (e.g., having a subject teacher and a special education teacher simultaneously available in class), special education, and study guidance. In addition, a new requirement for the number of guidance counsellors per student in upper secondary education will be applied not only for current students but also for former students who have not found a place in tertiary education, an objective approved as part of the reform of general upper secondary education. The objective is also to guarantee every child and young person the real chance to pursue an extra-curricular activity of their choice (e.g., arts, sports) as part of the school day.

3. **Education and training will enhance non-discrimination and equality of opportunity based on gender, spoken language, or education background.** The following measures in the government plan support this objective: Ensuring the quality and equality of early childhood education and care and increasing its participation rate; an obligatory equality and non-discrimination plan to protect people at all levels of education; the continuation of a program to revive the Finnish-Swedish sign language; enhanced support to meet Sámi language-nest activities to meet increased need; ensuring the right of every young person who has had to discontinue their studies before arriving in Finland and of paperless persons to complete comprehensive school education; a program to strengthen the learning of the second national language at school; and reinstituting the second national language as a mandatory exam in the Matriculation Examination (made optional in 2005 after a lengthy pilot).

The government will also immediately address any issues observed in the **quality of upper secondary education** in order to implement evidence-based remedies, as well as improve teachers' working conditions and young people's wellbeing in both general upper secondary schools and vocational education and training institutes. In particular, the government will evaluate the appropriate level of resources for teaching and guidance in relation to the changed requirements. The broad range and complexity of learning difficulties requires the reinforcement and updating of the pedagogical methods used in vocational education and training. The general academic studies in vocational education and training (basic skills, critical thinking, and learning to learn) will be strengthened. In particular, the opportunities for graduates from vocational education and training to apply to and successfully study in higher education institutions will be improved.

The Education Policy Report, submitted to stakeholders for comments in December 2020 and presented to Parliament in March 2021, aims, with its focus on year 2040, to secure educational equality well beyond the present government term. The report might fairly be called long overdue, as unlike in most other Ministries, the last such report in education dates to 2006. The report is especially relevant due to the demographic changes confronting Finland, including decreasing birth rate and urbanization, and their inevitable impacts on education (Helsingin Sanomat 2021a, 2021b). The report repeats many of the goals and measures of the Strategy 2030, and many commenters have criticized its lack of concrete measures for reaching those noble goals, such as closing the gaps in learning outcomes. The report also reactivates the discussion about unifying academic and vocational upper secondary education, which had been mostly dormant in the aftermath of the basic school reform when it was decided not to follow the Swedish model (e.g., Lundahl et al. 2010) but to preserve the Finnish dual model with its clear distinction between the vocational and academic education. A new argument for a move in the "Swedish" direction, not relevant at the turn of the last century, is Finland's shrinking age cohorts and the possible impacts of the extension of compulsory education, especially in more sparsely populated rural areas.

Epilogue

The writing of this report has been a surprising and interesting experience, even though both of its authors have worked as researchers in Finnish education for more than twenty years and have given dozens of presentations to foreign visitors coming to look at the "Finnish miracle." At times it feels like the picture Finnish educators have of their own system reflects reality through an international, PISA-tinted mirror. For that reason, even the writing of this report has felt at moments like shadow-boxing against a phantom version of the Finnish education system, while also dancing around Pasi Sahlberg's widely read book, *Finnish Lessons,* not to mention critical views on educational comparisons, the impossibility of transplanting education systems across national borders, administrative documents from across several decades, Finnish teachers' conflicting experiences of the reality of the Finnish basic school, international visitors' admiring—but also critical—views, and much more. Based on all the above, we have tried in the preceding hundred and fifty pages to give voice to all the different sources listed above while also allowing space for our own views on the strengths and relative weaknesses of the system, which we have jointly known in the roles of student, parent, teacher, principal, teacher educator, and researcher.

As we have shown in the first chapters of this report, many of the features of Finnish education, which received international recognition only with the first OECD PISA study in 2000, have a history reaching across two centuries and two "foreign" rulers of Finland, Sweden and Russia, taking varying forms across time. Paramount among the commending features is doubtless the universalistic idea of every child's right for free public education, which was already on the agenda of the two great Finnish educators of the 1800s, Snellman and Cygnaeus, and lies at the base of the Finnish comprehensive school reform of the 1970s. In its current form, this principle includes the idea of no educational dead ends, visible in the way Finnish students can enter tertiary education regardless of which of the two tracks of Finnish upper secondary education, academic or vocational, they choose at the end of nine-year comprehensive school. Yet, as we also show, the same principle is largely responsible for the slow progression of Finnish students from upper secondary into higher education due to the logjam formed by earlier contenders.

Many of the characteristic features of the Finnish basic school can be traced back to its universalistic ideals of equality and equity. The comprehensive school reform of the 1970s ended the earlier tracked system, meaning that all students began to follow the same academic curriculum under the tutelage of equally educated teachers who even went through extensive in-service education as part of the reform. Additionally, due to a coinciding

reform of higher education, classroom teacher education was transferred as a new Master of Education degree to the respective faculties in the universities. In addition, to secure the equity of education especially regarding weaker students, a strong emphasis was put on special education and later, in the changing social scene of the 2000s, on multi-professional collaboration in schools. These three—the common curriculum, teachers, and special education—have been among the chief explanations for Finnish students' high performance in the PISA studies, and there is no doubt that the comprehensive school has played a central role in the rising competence level of the population during the last three decennia of the 1900s. However, as also Sahlgren pointed out in his "counter-pamphlet" (2015) to Sahlberg's book, some of the explanations given for Finnish students' performance in the early PISA studies seem to contradict the slow impact on everyday school life of the different educational reforms and changes. Additionally, reflecting the complexity of education as a human endeavor, even many of those that might have or have had an explanatory power, have also presented unintended consequences. For example, the wish to prevent the real or supposed negative consequences of "too much testing" or grade retention seems to have led to a situation where students are unaware of standards for expected achievement and the weakest students are promoted from one grade level to the next without adequate skills and knowledge to manage the requirements of the syllabus.

Accordingly, despite the appreciation we feel toward and for many of the central features of the Finnish education system and the basic school as its foundation, we have seen it necessary to also bring up some key concerns. Central among these is the downside of "no testing" as it does not only mean a possible knowledge gap for students regarding what is expected of them but also that the system lacks adequate data for following the development of students' learning. We observe that not until Finnish students' declining performance in the OECD PISA studies stirred up concern around learning shows that the much applauded "trust" in the schools and teachers might not be sufficient for guiding young people's education in the rapidly changing world. Therefore, even if this report has been written as a response to the assignment of the NCEE and ACER, we hope that our analyses and arguments will also reach the Finnish audience.

Porvoo 16.4.2021
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Helsinki 16.4.2021
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