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## CHAPTER 7

# Cross-national achievement surveys and educational monitoring in Finland

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### Abstract

This chapter provides information on results of international achievement surveys and their use in monitoring educational outcomes in Finland. The educational monitoring system in Finland differs from that of many other countries. So far, little attention has been paid to its lack of standardised measurements and official control. Furthermore, Finnish education policies are strongly driven not by the aim to reach high rankings in international assessments but rather by the emphasis on quality and equity of education. This chapter describes the Finnish education system, its core curriculum for basic education and teacher training. We also review international achievement survey results and the education policy monitoring of the country in general. At the end of the chapter, we take a closer look at some monitoring results that have had an impact on political reforms and policy changes.

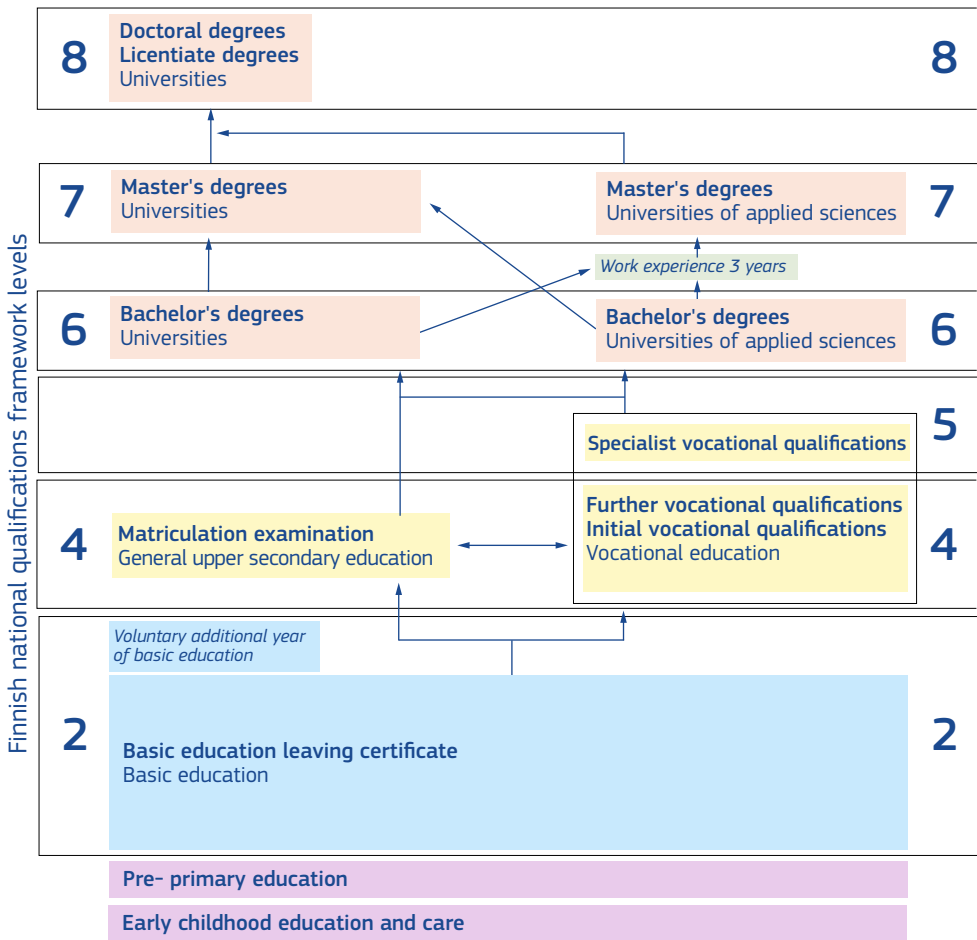
## Introduction to the Finnish education system

Along with other Nordic countries (Denmark, Iceland, Norway, Sweden), Finland follows a ‘Nordic model’, which is also called a ‘Nordic dialogue’ (Antikainen, 2006; Garvis and Eriksen Ødegaard, 2017; Telhaug et al., 2006). The Nordic countries continually score highly on quality of life measures, and many Nordic countries achieve above-average educational outcomes (Garvis et al., 2019, p. 1). The model aims to provide equal opportunities regardless of students’ socioeconomic status or residential area. Although the Nordic education systems are often considered to be alike, there are significant differences between them (Garvis et al., 2019). The previous chapter discussed the Swedish context; this chapter focuses on the Finnish education system.

The Finnish system is regarded as a cornerstone of the welfare of society, and it aims to offer Finnish citizens equal opportunities in education. However, this goal has not been fully met, as is evident in the international assessment results reviewed below (see also Saarinen et al., 2021). The Finnish education system consists of early childhood education and care, and pre-primary, basic, general upper secondary, vocational, higher and adult education. Compulsory education consists of 1 year of preschool, 9 years of basic education and, since August 2021, also some years of upper secondary education. Children enter preprimary education at the age of 6 and start their basic education the year they turn 7 years old. After basic education, students continue in either general or vocational upper secondary school. Students’ compulsory education ends when they reach the age of 18 or when they complete their upper secondary qualifications (Ministry of Education and Culture, 2020). The general structure of the current compulsory education system in Finland was founded in the educational reform at the beginning of the 1970s, and since then its core has been the comprehensive 9-year basic education. However, after that reform, some adjustments were made. For instance, the ability grouping that was widely used during the 1970s was officially abolished in the mid 1980s. Figure 7.1 presents the structure of the Finnish education system in more detail. The arrows show the different educational paths the students can take. The educational paths’ main feature is that students can move freely from one level to the next.

In contrast to other European countries, in Finland not only is compulsory education free of charge for students, but the costs of textbooks and other materials, a daily meal, in some cases travel expenses, school healthcare and other welfare services are also covered. In most cases, children attend their local school for compulsory education. However, some schools are specialised in specific subject areas, such as music, languages and sports, and these schools may request that the children sit an entrance examination. The emphasis on children attending the local public school was further strengthened in legislation in 2011 (Thuneberg et al., 2013).

**Figure 7.1:** The structure of the education system in Finland



Source: Finnish National Agency for Education (2021).

### ***Core curriculum for basic education***

The first national core curriculum for basic education was published in 1970 in Finland, and it was a document strongly emphasising the centralised character of the system. After multiple reforms, a direction for decentralisation and teacher autonomy was set (Vitikka et al., 2012), building the foundations of the Finnish curriculum, in which teachers and local authorities are given a large degree of autonomy. The curriculum for basic education is renewed approximately every 10 years. In addition, smaller refinements are made when needed. Every time a curriculum is renewed, the relevant stakeholders, including principals, teachers, education experts, organisations, researchers and policymakers, take part in

the drafting process. In the final phases, a larger audience is also consulted so that, for instance, parents can comment on the draft. Curricular reforms aim to reflect on changes and challenges in the globalised world in order to proactively prepare children for their future (Finnish National Agency for Education, 2016). The latest core curriculum for basic education was implemented for grades 1–6 in 2016 and for grades 7–9 in 2017–2019.

The nationwide core curriculum is considered a starting point for equality in and the quality of the entire education system. The national core curriculum provides a common direction and basis for renewing education and instruction in schools. The fundamental value of the core curriculum in basic education is that every pupil is 'unique and has the right to high-quality education. Pupils are heard, valued and encouraged. They feel that their learning and well-being matter. Pupils are guided towards a sustainable way of life and understanding the importance of sustainable development' (Finnish National Agency for Education, 2016, p. 2). It also has an important role in steering the Finnish education system, and it is a framework for local curricula. The local (as well as national) curriculum serves as a concrete guiding tool for teachers in their work, and it also highlights school-specific needs and opportunities. The curriculum sets out pedagogical content and goals, and the teacher can apply pedagogical freedom in its implementation.

The latest core curriculum (Finnish National Agency for Education, 2016) stipulates content for each school subject. The central aim of the new curriculum is to promote instruction with an integrated approach. The intention is to facilitate students' understanding of the relationships and interdependencies between different types of content. Therefore, the new core curriculum describes seven transversal competence areas (Finnish National Agency for Education, 2016, p. 2). These are:

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;
7. participation, involvement and building a sustainable future.

Furthermore, multidisciplinary learning modules support the dialogue between different subjects, and schools have to organise one module at least once every year.

### ***Teacher training guaranteeing high-quality education***

One important aspect of the Finnish education system for guaranteeing a good-quality and equal education for all is the high-quality university-level teacher education. A high level of education for teachers is seen as important, because Finnish teachers work fairly autonomously without pedagogical supervision.

Teacher training in Finland has a long history dating back to the country's independence in 1917. In the 20th century, two important steering documents were developed that helped shape the Finnish education system. First, in 1921 the Act on Compulsory

Education (*Laki oppivelvollisuudesta*)<sup>(11)</sup> was implemented, followed by the development of teacher training (Kuikka, 1988). This legislation required all municipalities throughout the country to provide education to all children aged 7–12 years. Consequently, however, these new requirements for compulsory education and teacher training led to a substantial teacher shortage (Määttä et al., 2013). Because of this shortage, teacher training colleges were created throughout Finland. After several decades, in 1971 the responsibility for teacher education was transferred to universities. The purpose of this shift was to both reassure the education research community and implement high-quality teacher training at master’s level (Harju-Luukkainen et al., 2019).

The main goal of Finnish teacher training is to develop enquiry-oriented teachers (Jyrhämä and Maaranen, 2012) who can adapt to their future local settings. The idea is that teachers will be able to combine theoretical knowledge and practice in the classroom. The teacher education programmes conduct research-based teaching that focuses on building student-focused pedagogical skills and decision-making, especially regarding how to justify one’s own pedagogical decisions (see Kansanen, 2006). In contrast to many other European countries, in Finland the teaching profession is highly valued and competitive, meaning that only the best teachers can enter the profession. Teachers in Finland complete a master’s degree from a research university. For classroom teachers (for grades 1–6), the major subject is education. Subject teachers (grades 7–12) have a subject major and on top of that receive teacher training, called pedagogical studies.

## International achievement surveys in Finland

The Finnish education system has repeatedly received international attention due to its students’ relatively high performance level in international educational assessment studies, such as the Programme for International Student Assessment (PISA) organised by the Organisation for Economic Co-operation and Development (OECD), and the Trends in International Mathematics and Science Study (TIMSS) and the Progress in International Reading Literacy Study (PIRLS) organised by the International Association for the Evaluation of Educational Achievement (IEA) (see, for example, Mullis et al., 2017; OECD, 2016). In Finland, the average results are high despite relatively moderate average economic investments in education (OECD, 2018). Finnish schools also seem to be relatively equitable in terms of the performance differences between socioeconomic student groups (Willms, 2010). In addition, variation in performance between schools is among the smallest in the world (OECD, 2016).

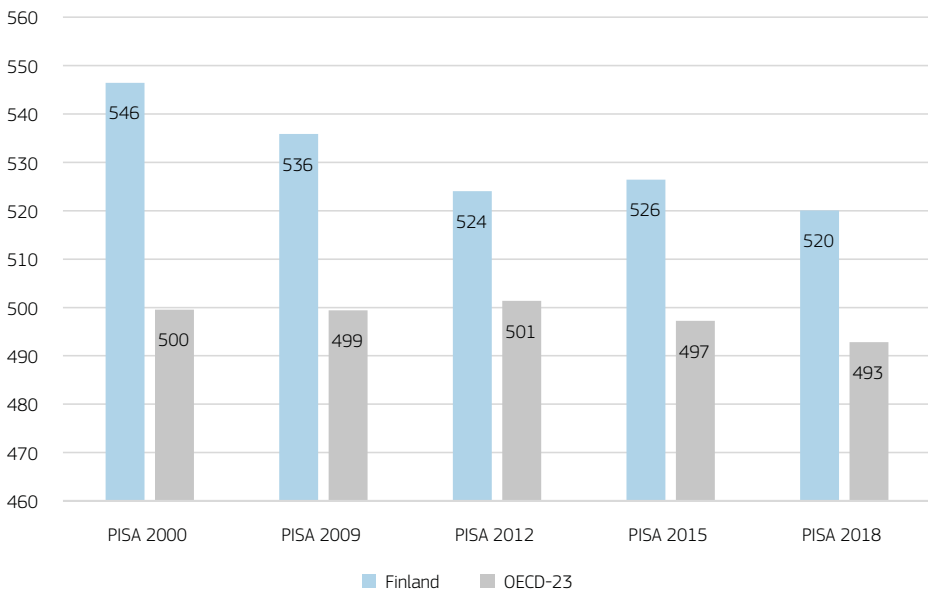
Finland has participated in the PISA assessments since the first cycle in 2000. In addition, Finland took part in the fourth-grade students’ PIRLS reading assessment in 2011 and 2016, and TIMSS in 1999 (seventh graders), 2011 (fourth, seventh and eighth graders), 2015 (fourth graders) and 2019 (fourth and eighth graders). Thus, of all these assessments, PISA provides the most regular data, on 15-year-old students for 20 years, allowing achievement trends to be observed. As PISA started with reading literacy as the

<sup>(11)</sup> <https://www.eduskunta.fi/pdf/saadokset/101-1921.pdf>

main assessment area in 2000 and offers extensive data on main assessment areas at 9-year intervals, the reading achievement of Finnish 15-year-olds can be observed in three cycles, in 2000, 2009 and 2018. Next, we will review the Finnish achievement patterns and trends in PISA, with the main focus on reading. We will then briefly review the trends in the IEA studies PIRLS and TIMSS.

In PISA 2000, the Finnish students outperformed their peers in all other participating countries with a reading mean score of 546, which was well above the OECD mean (500). In 2009, Finnish students' average performance in reading decreased by 10 points, and in 2012 it decreased by a further 12 points (Väljärvi and Sulkunen, 2016). Since then the negative trend has stagnated, and in 2018 the average reading score of Finnish students was 520. Figure 7.2 illustrates the trends in average reading performance in the most recent cycles of PISA (2009–2018) and shows the 2000 mean scores from the first PISA main assessment of reading. Finnish students' average reading performance has been clearly above the OECD average in each cycle. Despite the declining trend, Finland still ranks among the top OECD countries in PISA reading (OECD, 2019a, p. 57).

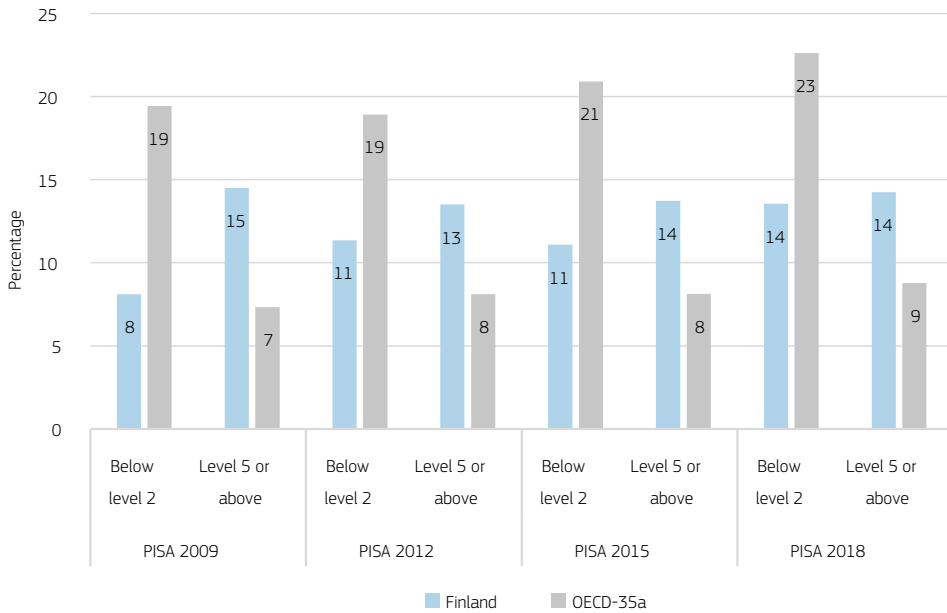
**Figure 7.2:** Trends in PISA reading scores in Finland and the OECD average (23 countries)



Source: OECD, PISA 2018 database, Table I.B1.10.

In addition to the decline in students' average performance, there has been a steady increase in the proportion of low performers, and in 2018 nearly 14 % of Finnish 15-year-olds were below proficiency level 2 in reading. The increase in the proportion of low performers started in PISA 2009 and has developed since, as illustrated in Figure 7.3. However, the proportion of top performers has remained stable (approximately 14 %). In addition, in the OECD countries on average the trend has been similar, and Finland still has a below-average share of low performers and an above-average share of high performers.

**Figure 7.3:** Shares of low and high performers in PISA reading in 2009–2018 in Finland and the OECD average (35 countries)



Source: OECD, PISA 2018 database, Table I.B1.7.

Finnish students' performance in mathematics and science in PISA has shown similar trends to those in reading literacy (Väljärvi and Sulkunen, 2016). The average performance in both started to show a significant decline in 2009, which continued in 2012, with the strongest decline in mathematics. Since 2012, the average performance in both mathematics and science has declined further (Leino et al., 2019). Moreover, in both assessment areas the share of low performers has increased and the share of high performers has decreased. In mathematics, Finnish students currently perform above the OECD average, but in science Finland is still among the top OECD countries.

As mentioned above, Finland strives for equal educational opportunities for all. In the early cycles of PISA, the Finnish education system was found to have relatively equitable learning outcomes compared with other OECD countries. Since 2009, however, PISA results have shown slightly less equitable performance. In reading literacy, the standard deviation stayed below the OECD average until 2009 but has since been at the OECD average level (Leino et al., 2019). In addition, in many PISA cycles Finnish students' economic, social and cultural background had a below-average relationship with performance in all areas assessed (OECD, 2010, p. 27; OECD, 2013, p. 37). However, between 2009 and 2018, the performance gap between advantaged students and disadvantaged students increased, for example in reading from 61 points to 79 points. Although the socioeconomic gap in reading in Finland is still below the OECD average (89 points in 2018), it has clearly widened. Furthermore, supporting students with immigrant backgrounds is a challenge for the Finnish educational system, as the gap between these students' reading performance and non-immigrant students' reading performance is among the largest in PISA, even



after accounting for socioeconomic status (OECD, 2019b, p. 185). Further equity concerns arise given the Finnish gender gap in reading, which has been among the widest in PISA since 2000. In 2018, girls outperformed boys by 52 points (OECD, 2019b, p. 143).

Turning to the PIRLS assessment, Finnish fourth graders' performance can currently be observed from 2011 and 2016 results. In both cycles, Finland has been among the top countries, and the average reading performance has been stable (Leino et al., 2017; Mullis et al., 2017). In addition, results related to equity have remained the same since 2011. This holds for the standard deviations illustrating the gap between low- and high-performing students and the gender difference. Furthermore, in the fourth grade, Finnish girls clearly outperform boys as the gender difference (22) is slightly above the international average and one of the largest among European countries. Moreover, the share of students achieving the advanced international benchmark has stayed the same (18 %; the international average is 10 %) since 2011. However, the share of students who did not achieve even the lowest benchmark doubled to 2 % from 2011 to 2016. Still, this was only half of the share of these students on average in PIRLS.

In TIMSS, the most recent Finnish participants are fourth graders in the 2011, 2015 and 2019 rounds and eighth graders in the 2011 and 2019 rounds. In general, in mathematics Finnish students in both age groups have shown above-average performance in each cycle, and in science their performance has consistently ranked among the top countries (Vettenranta et al., 2020a,b). Nevertheless, consistently with PISA there has been a decline since 2011 in both mathematics and science, although for eighth-grade mathematics the decline was not statistically significant. For eighth-grade science, between 2011 and 2019, there was a 9-point decline (from 552 points to 543 points). For fourth graders, there was a 10-point decline in average performance in mathematics from 2011 to 2015 (with mean scores being 545 and 535, respectively) and a 16-point decline in science (with mean scores being 570 and 554, respectively). In both areas, there were no statistically significant changes in fourth-graders' performance from 2015 to 2019 (in 2019, the mathematics mean score was 532 and the science mean score was 555). However, between 2015 and 2019, the share of fourth-grade students below the low international benchmark in both mathematics and science increased by 2 percentage points to 5 % and 3 %, respectively. The share of students reaching the advanced benchmark also increased (by 3 percentage points in mathematics and 2 percentage points in science), resulting in 11 % high achievers in mathematics and 15 % in science in 2019. For eighth graders, there was a 3 percentage point increase in students below the low benchmark in mathematics and a notable 5 percentage point increase in the same figure for science (7 % in maths and 6 % in science in 2019). In science, there was also a 3 percentage point increase in the share of students achieving the advanced benchmark, which resulted in 16 % of Finnish students achieving this benchmark in 2019. All in all, the shares of students achieving TIMSS benchmarks are at a high level internationally.

The results of the assessments, particularly those of early cycles of PISA, showed that the Finnish education system, which aims for educational equity, ranked relatively well in international comparisons, as high-performing students did not do any worse than their peers in other countries, whereas the weakest students outperformed their international counterparts (Hautamäki et al., 2009). Thus, the results may have contributed to basic education legislation changes that have strengthened the main principles of the Nordic

educational ideas even further (Thuneberg et al., 2013). The first PISA results were used as evidence of why the education system did not need extensive reforms. Accordingly, the declining trend that has been observed in both international and national assessments since 2006 (Hautamäki et al., 2013; Leino et al., 2019; Vetterranta et al., 2016) has been taken seriously, and programmes have been launched to turn the trend around. These programmes have included thematic assessments that delve deeper into the details of the national features of the education system, national development programmes on literacy, and additional funding for municipalities and schools to improve their practices. This will be discussed further in the next section.

## Education policy monitoring in Finland

In this section, we provide a description of the Finnish monitoring processes at different levels and how achievement results are used to inform and further develop the education system. The Finnish education policy monitoring system differs from that of many other countries. According to Vainikainen and Harju-Luukkainen (2020) very little attention has been paid to the Finnish assessment system and especially to its lack of standardised measurements and official control. However, these factors contribute significantly to the overall functioning of the education system. In practice, the assessment of the education system happens at three different levels. School-based assessments are the most common form of assessment in Finland, and they are conducted by the teachers and schools. These assessments happen across the country at classroom level, every day. The national curriculum for basic education states the following (Finnish National Agency for Education, 2016, p. 46): ‘According to the Basic Education Act, the task of student assessment is to guide and encourage pupils to study and to develop the student’s prerequisites for self-assessment. The student’s learning, work and behaviour must be assessed in a variety of ways. These tasks are the starting point for developing a culture of assessment in primary education. The focus is on assessment that promotes learning.’ This means that teachers assess students summatively and formatively throughout the school year and adjust their teaching methods according to individual students’ needs. Much of the assessment concerns the interaction between teachers and students. In addition, Finnish teachers make sure that students receive feedback that guides and encourages learning from the beginning, as well as information about their progress and skills. Working with students’ families is part of a good evaluation culture. The goals of schoolwork and school assessment practices are discussed with parents and guardians. In grades 1–7, assessment translates into verbal or numerical assessment or a combination thereof according to the decision of the education provider. Numerical assessment is used in grades 8 and 9. The numerical grade is an average, a summative assessment of the student’s level of competencies in relation to the objectives in each subject. In Finland, the national core curriculum for basic education determines the learning objectives for each school subject. Grading guidelines are also given. Objective evaluation at this point is of great importance; the grades obtained in different subjects at the end of compulsory education will largely determine the next steps in the student’s educational pathway.

Furthermore, the Finnish Education Evaluation Centre (FINEEC) has responsibility for conducting national assessments. Among other things, FINEEC is responsible for evaluating

learning outcomes with respect to the distribution of lesson hours and the national core curriculum targets stipulated in the Basic Education Act (628/1998) <sup>(12)</sup>. The assessment of learning outcomes is based on sampling the student cohort. Typical sample sizes comprise 5–10 % of the age group, which means that each assessment involves about 4 000–6 000 students (Jakku-Sihvonen, 2013, p. 24). The assessed schools represent around 15 % of all the schools that provide basic education in Finland (Harju-Luukkainen et al., 2016; Ouakrim-Soivio, 2013, p. 21).

According to Harju-Luukkainen et al. (2016), the assessment of learning outcomes can be viewed from many perspectives, and it has different purposes for different target groups. National assessments provide valuable information for the highest educational authorities. In Finland, basic education is expected to secure equal educational opportunities for all students. Therefore, the equity of learning outcomes is studied from several perspectives, such as those of students' gender, region, type of municipality, socioeconomic background and language spoken at school. In principle, reaching the objectives for equal learning opportunities as defined in the national core curriculum should lead to educational equity, so that there would be no statistically significant differences between the learning outcomes of boys and girls, for example, or between different regions in Finland.

From the school's perspective, the national assessments of learning outcomes provide benchmarks for schools to evaluate their own success in reaching their objectives of teaching and learning in different subjects. Schools selected for an assessment receive feedback in the form of reference data on the results and learning-related perceptions of their own students. Because there are no national examinations at the end of basic education, many schools welcome this opportunity to compare their own results and grading practices with the national benchmarks and use the assessment as a tool to develop their instruction in different subjects (Harju-Luukkainen et al., 2016; Ouakrim-Soivio and Kuusela, 2012, p. 13).

Besides the two national monitoring systems, international achievement surveys are conducted regularly in Finland. Nevertheless, their role in the education system's development is still rather small compared with that of national assessments. Reports and research connected to educational achievement surveys are published, and results are discussed publicly. However, these results are not used as actively in the development of the education system as those of national assessments. This issue and the role of different policies and practices in assessment will be discussed in the next section.

## Analysis of policies, practices and political reforms

In this section, we will take a closer look at monitoring results that have had an impact on political reforms and/or policy changes, keeping in mind the framework of the entire system. Factors such as a lack of standardised measurements and control (Vainikainen et al., 2017) contribute significantly to the overall functioning of the education system. Furthermore, it is notable that a national central organ that oversees both national

<sup>(12)</sup> <https://www.finlex.fi/en/laki/kaannokset/1998/en19980628.pdf>

and international assessment policies, practices and assessment results does not exist. According to Vainikainen and Harju-Luukkainen (2020), this has led in some cases to a situation in which participation in some important international assessments has been irregular and there have been problems with the capability of national sample-based assessments to produce enough comparable data suitable for monitoring trends. Therefore, there are many challenges as well as benefits in the Finnish monitoring system; however, we will focus only on a few of them. According to the Act on Compulsory Education (paragraph 1) <sup>(13)</sup>, the aim of compulsory education in Finland is to ‘secure the basic skills and education necessary for everyone in life and society, and to promote equal opportunities to develop oneself in accordance with one’s abilities and needs. In addition, compulsory education aims to raise the level of education and skills, reduce learning gaps and increase educational equality, equity and the well-being of children and young people.’ These premises guide Finnish compulsory education but also contribute to its monitoring policies and practices.

Both national and international assessments inform educational policy in Finland, but their roles vary. The national assessments are curriculum based (see, for example, Kauppinen and Marjanen, 2020), and thus they are relevant, for example, for curriculum development. The international assessments have a different focus. PISA aims to assess competencies that adolescents will need in their future, regardless of the subject area in which these competencies were acquired (OECD, 2019a). As PIRLS and TIMSS are curriculum-based assessments but involve numerous participating countries with varying curricula, the assessments unavoidably cover only the common parts of the curricula. Thus, international assessments can only to a limited degree steer curriculum development, which is an important and in Finland the most essential part of education policy. As mentioned, Finnish educational policies are strongly driven not by the aim of achieving high rankings in international assessments but by the quality and equity of education. Nevertheless, international assessments still have some impact on educational policy, as discussed below.

In the domain of literacy, for example, the excellent results of the PISA 2000 assessment surprised many stakeholders, and the national programme aiming to develop literacy education in Finland (Ministry of Education and Culture, 2000) lost its momentum to some degree. This aptly demonstrates how the top results in PISA were followed by a period during which only little effort was made to improve literacy education. However, this changed after the declining results in PISA 2009. Since then, literacy has become a key topic of discussion, and there have been numerous policy measures to improve the quality of literacy education. One of the key elements in developing high-quality literacy education is the national curriculum for basic education, as it has an impact on all children and adolescents. During curriculum development, concerns arising from declining PISA results contributed, in part, to introducing multiliteracy as a transversal competence area in the national curriculum. In practice, this meant that multiliteracy – the competence to interpret, produce and evaluate various kinds of texts in multiple contexts (Finnish National Agency for Education, 2016, pp. 21–22) – became a core area

<sup>(13)</sup> <https://www.finlex.fi/fi/laki/ajantasa/2020/20201214?search%20%5Btype%20%5D=pika&search%20%5Bpika%20%5D=laki%20%20oppivelvollisuudesta>

to be taught in all school subjects. Teaching discipline-specific language and literacy both intensifies literacy education and supports content learning at the same time (Fang and Coatoam, 2013). However, multiliteracy as a transversal competence also shows how curriculum development has not been limited to reading literacy as defined in PISA (OECD, 2019a) but has been influenced by the topical research literature (Cope and Kalantzis, 2009) as well as the needs of society and working life in a globalised world.

In addition to curriculum development, literacy has also been the focus in many other policy initiatives during recent years. Some of the initiatives are strategic and provide guidelines for nationwide literacy stakeholders, including but not limited to those in school education. These initiatives include, for example, the Literacy Forum – a group of literacy researchers, practitioners and other literacy stakeholders who provided guidelines for supporting the reading engagement and literacy competence of Finnish children and adolescents in 2018 (Literacy Movement, 2018; Ministry of Education and Culture, 2017). The work of the Literacy Forum is currently being updated, as the Ministry of Education and Culture has established a task force to prepare the national literacy strategy, which was to be finalised in autumn 2021 (Finnish National Agency for Education, 2021). Based on the guidelines of the Literacy Forum, the National Agency for Education established an ongoing governmental programme – Literacy Movement – to coordinate and support the numerous literacy activities by various stakeholders in Finland.

Other initiatives are shorter development programmes, such as the Literacy Movement at School (2019). These programmes provide schools and teachers with resources and support for developing their literacy activities and innovative practices. The downside of these initiatives is that they benefit primarily those schools that apply and are accepted for the programmes, and they suffer from a limited funding period. However, the practices developed may be disseminated to other schools and thus may benefit a broader target group in the future.

Concern about declining results has turned into vigorous development of policy measures and practices, which can be considered a positive consequence of international assessments. Their role, however, should not be overestimated. Although the results of these assessments, particularly PISA, are often referred to in arguments for new initiatives, they are not the sole contributing factor but part of a larger landscape of educational policy development, and they do not have a straightforward relationship with policy initiatives (Seppänen et al., 2019). In fact, many researchers in Finland (see, for example, Kivinen and Hedman, 2017) caution that PISA does not really tell us anything about the success of educational policy in a country, as it gathers very few data on education as such. Therefore, in Finland, the development of the education system is not limited to comparing competence levels across countries using instruments such as PISA but tied up with the development of the overall quality of the system, including in relation to international large-scale assessments.

Moreover, there are also some negative and unintended consequences of the discussion related to international assessment results. In reading literacy, for example, the large gender difference reported in PISA reading has dominated public discussions in Finland

since PISA 2000. In public discussions, boys are considered low performers and girls are considered high achievers based on the two gender groups' average results (Sulkunen and Kauppinen, 2018). These frequently repeated statements are powerful and even harmful, as they strengthen gender stereotypes and obscure the socially defined nature of gender norms (White, 2007). In education, there is a risk that low-performing girls and high-performing boys will go unnoticed and will be left without support because of the gender stereotypes. Moreover, such portrayals of achievement survey results obscure other social factors related to equity and the real risk groups among both boys and girls (Brozo, 2019). It is also noteworthy that the discussion on boys' literacy has not proved to be fruitful in solving the issue, as the gender gap still persists (OECD, 2019b, p. 147). Furthermore, there has also been criticism of international assessments, particularly those adopting the OECD's discourse on literacy as a prerequisite for an individual's economic success and participation in society – as critics consider it too narrow and one-sided (see, for example, Mäkinen, 2021) – and equating PISA results with the quality of education (Kivinen and Hedman, 2017). This criticism is presented mainly by researchers. However, there is also awareness among policymakers and decision-makers that the international large-scale assessments do not provide enough data to solve educational issues. For example, the large gender gap for Finnish adolescents has been verified in multiple assessments with limited information on the causes. Thus, with a mandate from the Ministry of Education and Culture, FINEEC further studied the factors causing the gender gap to identify norms, structures and practices related to gender equality (Saarinen et al., 2021).

In summary, in the Finnish context, the lack of standardised examinations gives more freedom to schools and teachers to implement the curriculum in a way that supports individual students' educational outcomes in accordance with the aim of the education system (see, for example, Volante et al., 2020). However, the declining trend in international assessments and the increase in regional differences (Harju-Luukkainen et al., 2020; Vetterranta et al., 2016) is challenging the Finnish monitoring system. The Finnish school system is still maintaining a good level of quality nationwide, and it aims to provide an equal starting point for all pupils. However, as illustrated in this chapter, this aim has not been fully met, particularly when we look at equity of learning outcomes (and not only, for example, learning opportunities). Indeed, recent educational achievement results have shown that the education system needs to be developed further to keep its high ranking in international comparisons, if this is what is highlighted, and to support its unique qualities that have been found to be effective. In the future, the Finnish education system could benefit from a broader national discussion and a clearer national framework for monitoring practices on students' educational outcomes and equality.

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