



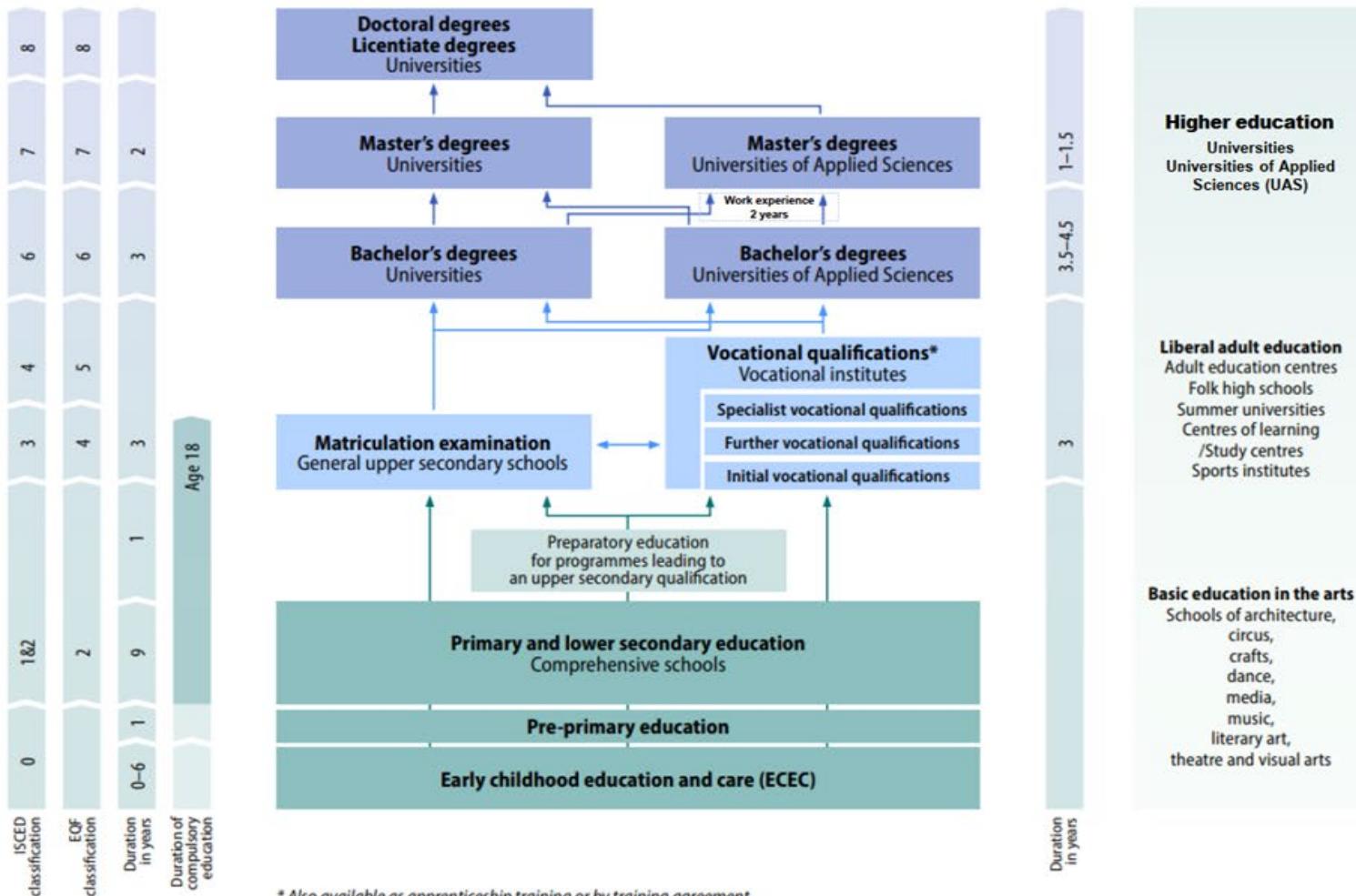
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Assessments of learning outcomes – a tool for quality assurance in Finland

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EDUCATION SYSTEM IN FINLAND



** Also available as apprenticeship training or by training agreement.*

Introduction

Finnish educational evaluation system

- [No Inspectorate at all! \(since 1991\)](#)
- [No standardized tests!](#)
 - external assessment of learning outcomes in schools
- Learning outcomes are assessed nationally (mainly in basic education) using sample-based assessment of learning outcomes. General upper secondary school: matriculation examinations, MEB)
- **As part of the national learning outcomes assessment system, international comparative evaluations (IEA and OECD assessments) are also carried out.**

Assessment of learning outcomes in Finland (general education) Mandatory for education providers (mainly municipalities)



National (domestic) evaluations (MEB/FINEEC)	OECD (Organisation for Economic Co-operation and Development) FIER (consortiums with Universities of Tampere, Helsinki)	IEA (International Association for the Evaluation of Educational Achievement) FIER
Matriculation examination board The only national (domestic) "high stakes" exam for the entire cohort: Matriculation examination FINEEC Development and monitoring of learning outcomes in different subjects (https://karvi.fi/)	The Programme for International Student Assessment (PISA) Triennial international survey to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students (Numeracy, Literacy, Science). (NOTE! National options, English language included in 2025) PIAAC ('PISA for adults') TALIS (Teaching and learning international survey)	TIMSS (Trends in International Mathematics and Science Study) PIRLS (Progress in International Reading Literacy Study) International studies assess the literacy and proficiency of 4th and 8th graders in mathematics and natural sciences ICILS (International Computer and Information Literacy Study) ICCS (International Civic and Citizenship Education Study)

Introduction



- The motives for evaluating education are both scientific and political. Over the past 10–20 years, the focus has shifted towards political interests (Ursin & Välijärvi, 2010).
- Recently there have been research conducted by the Nordic countries on how national and international assessments of learning outcomes have underpinned policy decisions when assessing the quality of teaching, schools and the education system (Sivesind & Karseth, 2022).
- In the Nordic countries and Estonia, municipalities use assessment data in planning their own activities, and the learning outcomes also work nationally, for example in the preparatory work of ministries.

Introduction



- In some Nordic countries, such as Sweden and Iceland, declining PISA scores have made it necessary to change education policies. The situation is peculiar in that the PISA results do not in themselves reflect the development of the education system, but the skills of pupils.
- According to Magnúsdóttir and Jónasson (2022), external guidance played a significant role in political decision-making in Iceland's school reform in 2013–2017.
- Also, in Sweden *Samling för skolan: Nationell strategi för kunskap och likvärdighet* The 2015–2018 strategy was based on, among other things, Sweden's weakest PISA scores to date and the OECD's Improving Schools in Sweden report. Pont et al., 2015) recommendations,

Key concepts



Education policy = according to Lehtisalo and Raivola (1999) "... that part of public policy which caters to the needs of society and the population and whose principal political function is to supervise and direct the distribution of formal education' (p. 31).

Education policy measures / Policy actions = Decisions and strategies implemented by the state or other actors in the education system, such as municipalities, to organise and develop education and training.

For example, from the perspectives of the **structure of the education system** (i.e. how different forms of education and training are organised), **funding** (how the funding of education and training is organised), **curricula design** (what, why and with what resources are taught) or **equality in education** (how to ensure that education and training are accessible and accessible to all).

Policy documents in this review



Research questions



How learning outcomes have been used:

RQ1 extending compulsory education,

RQ2 ensuring the quality of basic education, and

RQ3 as a guidance “tool” in basic education?

Research method and data



Methods

We apply the critical analysis (specifically content analysis) of existing studies and documents (Corbetta 2003).

In data-driven content analysis, units are not predetermined, but the data guides questions about what is important.

Data

- Government programmes of Marin (2019) and Orpo (2023)
- Education Policy Report (2021) and Education review (2023)
- Other guidance documents outlining the quality of comprehensive school education and the extension of compulsory education (2021),
- National and international assessments of learning outcomes (2013-2022), mainly PISA-results

RQ1 How have learning outcomes been used to extend compulsory education?



Document	Measures	Learning outcomes in the background
Government Programme (2019, 163; 164;165; 166)		
<ul style="list-style-type: none">- Inequality, learning differences and social exclusion as phenomena threaten the success story of Finnish education- Regional, socio-economic and gender differences, as well as the heritability of education, are increasingly visible in learning and education.- Raise Finland's level of education and competence, strengthen educational equality and reduce learning gaps.- We will launch a quality and equality programme for comprehensive school education to improve learning outcomes and reduce inequality:- Strengthening the second national language.	<ul style="list-style-type: none">- Extension of compulsory education as of 1.8.2021- Adding a second national language (B1 syllabus) starting from 1.8.2024- Right to Learn project: Right to learn – an equal start to the learning path development programme (2020–2022)- -> final report -> funding decision 1.1.2023- Project to improve the quality and equality of comprehensive school education: narrowing and preventing learning differences due to socio-economic background, immigrant background or gender. -> model for establishing the gender equality grant as part of the funding of comprehensive school education as of 1.1.2023.	<ul style="list-style-type: none">- B1-Swedish (Hildén & Rautopuro, 2013)- A1 and B1 Swedish (Härmälä & Marjanen, 2023a, 2023b)- S2 learning outcomes (Kuukka & Metsämuuronen, 2016)- Mother tongue and literature- International learning outcomes (PISA, PIRLS, TIMSS) and assessments by the Finnish Education Evaluation Centre (FINEEC) as well as national Learning to Learn surveys.- OECD (2015)- FINEEC (2020)
Report on Education Policy(2021, 12-13; 17-18; 22; 59; 68; 74; 76; 79; 80-81)		
<ul style="list-style-type: none">- Decline in learning outcomes and decline in learning-related attitudes- Differences between pupils have grown and the impact of pupils' background on learning outcomes has increased- Adequate basic skills (literacy, numeracy) important for integration- Digitalisation has not improved learning outcomes		
Right to learn report (2022, 14; 35)		
<ul style="list-style-type: none">- Social and regional segregation challenges the basic education and early childhood education system both locally and nationally In basic education, the growing skills gap between both pupils and schools.- On the impact of regional, socio-economic and ethnic segregation on the regionalisation of educational disadvantage in learning outcomes + deprived neighbourhoods of large cities.- The learning outcomes of pupils with an immigrant background are clearly lower than those of pupils belonging to the majority population.		

RQ 2 How have learning outcomes been used to ensure the quality of basic education?



Document	Measures	Learning outcomes in the background
<p>Government Programme (2023, 78-79; 82)</p> <p>Learning outcomes and educational attainment of Finns will rise. The competence of basic skills is strengthened, and everyone achieves sufficient basic knowledge from comprehensive school. According to PISA surveys, Finnish learning outcomes have been on a downward trend since 2006. In particular, the deterioration of basic skills (reading, writing and numeracy). Deteriorating learning outcomes during the 2000s. A wide range of researchers and experts from different fields and fields of education will be gathered to assess the development needs of comprehensive schools. A parliamentary monitoring group will be set up to support this work. The necessary proposals for legislative amendments and other measures will be prepared by the end of 2025</p> <p>Education Review (2023, 11; 12; 16-18; 124-127; 192)</p> <p>- Deterioration and causes of decline, gender differences, skills development, growing inequality, the role of teachers (in the causes of the rise/fall), attitudes that promote and hinder learning, systematic differences in learning outcomes, segregation between and within schools</p>	<p>2 more teaching hours / week in mother tongue and literature for grades 1-2 and 1 more teaching hour / week in mathematics for grades 3-6 to strengthen basic skills starting from 1.8.2025</p> <p>Future work in comprehensive school: https://valtioneuvosto.fi/hanke?tunnus=OKM004:00/2024</p> <p>Ministry of Education and Culture working group to strengthen learning outcomes: https://okm.fi/hanke?tunnus=OKM012:00/2024</p>	<p>PISA 2018; 2022 -Mathematics - Literacy - Natural Sciences</p> <p>TIMSS 4th grade math 2011; 2015 ; 2018 TIMSS 8th grade math 2011; 2015; 2018 TIMSS 4th grade natural sciences. 2011; 2015; 2018 TIMSS 8th grade natural. 2011; 2015; 2018 PIRLS 2011; 2016; 2021 FINEEC's learning outcomes mathematics (2013; 2021; 2023), mother tongue and literature (2019)</p>

RQ 3 How have learning outcomes been used as a guidance tool in basic education?



Three different levels:

I Government programmes (2019; 2023) generally refer to learning outcomes, and PISA results in particular

According to PISA surveys, Finnish learning outcomes have been on a downward trend since 2006. In particular, the deterioration of basic skills (reading, writing and numeracy) requires measures....According to an OECD study published in October 2022, the educational level of Finnish young people has fallen below average, whereas in 2000 Finland was still among the highest among OECD countries. (Government 2023, 79.)

II The Education Policy Report (2021) and the Education and Culture Review (2023) also include IEA's international assessments, especially TMSS, PIRLS. National assessments of learning outcomes mentioned in a "side sentence".

The downward trend in learning outcomes is indicated by both international and national learning surveys, such as PISA, PIRLS, TIMSS, evaluations by the Finnish Education Evaluation Centre (FINEEC) and national studies on learning to learn.

According to studies, the decline is particularly visible in literacy and numeracy skills, which form the basis for increasing the competence of children and young people. According to the PISA survey, the decline in the competence level of Finnish young people in reading, mathematics and natural sciences has been among the largest in all participating countries in the 2010s. Competence has deteriorated at all levels of competence, but especially the share of low-skilled pupils has grown....(Government 2021, 79.)

RQ 3 How have learning outcomes been used as a guidance tool in basic education?



3) In other education policy guidance documents, learning outcomes and their causes are discussed thoroughly and in detail.

The results have also been used to justify future measures, such as a change in the funding system for basic education. In its work, the working group has also taken into account a study conducted by the Finnish Education Evaluation Centre (FINEEC) on the causes and backgrounds of differences in learning outcomes between genders and within (Saarinen et al. 2021)... As a rule, the national quality criteria for providers of comprehensive school education would not apply to learning outcomes. (Ministry of Education and Culture 2022, 31.)

Discussion



- How can the information produced by national and international evaluations be adapted so that it serves the comprehensive development of the Finnish (basic) education system as well as possible?
- **-> National and international assessments of learning outcomes are used clearly more than before (Rautopuro et al. 2023)**
- The task of the OECD is to collect data and produce analyses and comparative data from different countries, as well as to make recommendations on the procedures and standards to be followed.
- The purpose of the PISA survey is to produce information on the state and outcomes of education and non-formal learning in an international reference framework.
- **The Government Programmes level, the references are very general and mainly linked to the OECD's PISA results.**
 - > To what extent do PISA results reflect pupils' competence?**

Discussion



- The PISA 2022 results have an impact:
 - in Estonia, justifying the transition of schools to Estonian-language teaching
 - in Sweden changes to curriculum and measures to enhancement of student well-being and motivation
 - in Denmark improvements in the use of digital devices in Danish schools.

Literature



- Corbetta, P. (2003). *Social research: Theory, methods and techniques*. SAGE Publications, Ltd, <https://doi.org/10.4135/9781849209922>
- Härmälä, M., & Marjanen, J. 2023a. *A-ruotsin oppimistulokset perusopetuksen päätöväaiheessa 2022*. Julkaisut 24:2023. Kansallinen koulutuksen arvointikeskus.
- Härmälä, M., & Marjanen, J. 2023b. [B1-ruotsin oppimistulokset perusopetuksen päätöväaiheessa 2022](#). Julkaisut 10:2023. Kansallinen koulutuksen arvointikeskus.
- Jakku-Sihvonen, R. 2009. Tasa-arvo ja laatu koulutusjärjestelmän kehittämisperusteina. Teoksessa K. Nyyssölä & R. Jakku-Sihvonen (toim.) *Alueellinen vaihtelu koulutuksessa – Temaattinen tarkastelu alueellisen tasa-arvon näkökulmasta*. Helsinki: Opetushallitus, 25–37.
- Jakku-Sihvonen, R. & Kuusela, J. 2012. *Perusopetuksen aika. Selvitys koulujen toimintaympäristöä kuvaavista indikaattoreista*. OKM:n työryhmämuistioita ja selvityksiä 2012:13. Helsinki: Opetus- ja kulttuuriministeriö.

Literature



- Kalenius, A. (2023). *Sivistyskatsaus*. Opetus- ja kulttuuriministeriön julkaisuja. 2023:3.
- Karvi 2020. *Millaista on yhdeksäsluokkalaisten kielellinen osaaminen? Suomen kielen ja kirjallisuuden arvioinnin 2019 päätulokset*. Kansallinen koulutuksen arvointikeskus. Tiivistelmät 17:2020.
- Kuukka, K. & Metsämuuronen, J. (2016). *Perusopetuksen päättövaiheen suomi toisena kielenä (S2) -oppimäärän oppimistulosten arvointi 2015*. Helsinki: Kansallinen koulutuksen arvointikeskus.
- Lehtisalo, L., & Raivola, R. (1999). *Koulutus ja koulutuspolitiikka 2000-luvulle*. WSOY.
- Magnúsdóttir, B. R., & Jónasson, J. T. (2022). The irregular formation of state policy documents in the Icelandic field of education 2013–2017. In B. Karseth, K. Sivesind & G. Steiner-Khamisi (Eds.), *Evidence and expertise in Nordic education policy: A comparative network analysis* (pp. 183–225). Palgrave Macmillan.
https://doi.org/10.1007/978-3-030-91959-7_6
- OECD. (2015). *Students, computers and learning: Making the connection*. OECD publishing, Paris.
https://www.oecd.org/en/publications/students-computers-and-learning_9789264239555-en.html

Literature



- Opetus-ja kulttuuriministeriö. (2022). *Kohti laadukasta ja tasa-arvoista lähipalvelua ja lähikoulua Oikeus oppia -ohjelman Koulutuksellisen tasa-arvon ja positiivisen erityiskohtelun edistämistoimia varhaiskasvatuksessa, esi- ja perusopetuksessa valmistelevan työryhmän loppuraportti 2022*. Opetus- ja kulttuuriministeriön julkaisuja 2022:30. https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/164346/OKM_2022_30.pdf?sequence=1&isAllowed=y
- Pont, B., Elmore, R., Kools, M., & Donaldson, G. (2015). *Improving schools in Sweden: An OECD perspective*. OECD.
- Rautopuro, J. (2013). *Hyödyllinen pakkolasku. Matematiikan oppimistulokset peruskoulun päätöväaiheessa 2012*. Koulutuksen seurantaraportit 2013:3. Opetushallitus.
- Rautopuro, J., Ouakrim-Soivio, N., & Välimaa, J. (2023). Peruskoulua oppimassa: Oppimistulosten arvioinnit koulutusta kehittämässä. *Kasvatus & Aika*, 17(4), 5-22.
- Saarinen, J., Siekkinen, K., Laimi, T., Ahonen, A., Bernelius, V., Brunila, K., ... & Norrena, J. (2021). *Tasa-arvo teoiksi ja toteksi. Sukupuolten sisäisten ja välisten oppimistuloserojen syitä ja taustoja perusopetuksessa*.
- Valtioneuvoston asetusperusopetuslaissa tarkoitettun opetuksen valtakunnallisista tavoitteista ja perusopetuksen tuntijasta (422/2012)



- Valtioneuvosto. (2019). *Pääministeri Sanna Marinin hallituksen ohjelma 10.12.2019: Osallistava ja osaava Suomi – sosiaalisesti, taloudellisesti ja ekologisesti kestävä yhteiskunta. (Programme of Prime Minister Sanna Marin's Government 10 December 2019. Inclusive and competent Finland - a socially, economically and ecologically sustainable society)*
https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/161935/VN_2019_33.pdf?sequence=1&isAllowed=y
- Valtioneuvosto (2021). *Valtioneuvoston Koulutuspoliittinen selonteko. (Education Policy Report of the Finnish Government)* Valtioneuvoston julkaisuja 2021:24.
https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/163273/VN_2021_64.pdf?sequence=1&isAllowed=y
- Valtioneuvosto. (2023). *Vahva ja välittävä Suomi. Pääministeri Petteri Orpon hallitusohjelma 20.6.2023. (A strong and committed Finland : Programme of Prime Minister Petteri Orpo's Government 20 June 2023)*
<https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/165044/Programme-of-Prime-Minister-Petteri-Orpos-Government-20062023.pdf?sequence=4&isAllowed=y>