



REPUBLIC OF ESTONIA
MINISTRY OF EDUCATION
AND RESEARCH



OECD Implementing Education Policies

Project “Enhancing data-informed strategic governance in education in Estonia”

Indicators and principles for strategic education monitoring in Estonia

Stakeholder Webinar

29 April 2021

Background

The Estonian education system is one of the best performing systems among OECD countries, combining quality and equity in education. One of its main features is its decentralised governance and high degree of autonomy of local authorities (school owners): the state sets national standards and establishes principles of education funding, supervision and quality assessment. Within these guidelines, local authorities and schools have a high level of autonomy for resource allocation and curriculum.

In this context, the improvement of learners' experience and the quality of education as a whole requires the use of relevant evidence and data allowing for a sound strategic education governance. Monitoring education is a central activity in balancing autonomy with accountability, promoting more effective and efficient policy-making, and ensuring equitable and quality education for all. As Estonia finalises the Education Strategy 2035, it is important to have a set of indicators that allow to measure progress with the strategy and its priorities.

To this end, the OECD has been working with Estonia's Ministry of Education and Research (MoER) and European Commission DG Reform, and has engaged with different stakeholders across Estonia. The result is the development of a set of indicators that can contribute to measure progress with the strategy that are SMART¹ and mapped these in terms of how they align in the strategy in terms of inputs, processes and outputs.

Webinar objectives

This webinar is organised to:

- Present to education stakeholders the final set of indicators developed by the OECD, the European Commission and Estonia's Ministry of Education and Research
- Receive feedback from stakeholders on the use of these indicators at school level
- Discuss the use of these indicators in relation to the strategy in the future.

Date and time

Thursday 29 April 2021, 10:30 to 16:30 (Tallinn time)

• ¹ Specific, Measurable, Attributable/Actionable, Relevant, Timely/Time-bound.

Agenda of the webinar

Tallinn time	Paris time	Activity
10:30-11:00	9:30-10:00	Sign in to the seminar
11:00	10:00-10:10	Welcome and introduction by MoER, EC-DG Reform, and OECD
<i>Thematic session 1: Developing indicators for Estonia's Education Strategy 2035</i>		
		Estonia's Education Strategy 2035
	10:10-10:40	Presentation by Tatjana Kiilo, MoER (15 min) Q&A with participants (15 min)
		Developing indicators to monitor the Education Strategy 2035
	10:40-11:40	Presentations by Beatriz Pont (project approach) and Corinne Heckmann (indicators), OECD (30 min) Q&A with participants (30 min)
Lunch		
<i>Thematic session 2: Using the indicators for strategic education monitoring</i>		
		Current data uses and future data needs at school and local level
14:00	13:00-13:30	Presentation by Kairit Tammets, Tallinn University (15 min) Q&A with participants (15 min)
		Using indicators for strategic monitoring across the system
		Presentation by Marie-Hélène Doumet, OECD (15 min) Questions for discussion in breakout rooms (45 min)
14:30	13:30-14:30	1) <i>How can schools be supported to use these indicators? And more broadly to develop an evidence-informed mindset?</i> 2) <i>How can schools balance the use of data collected by schools themselves and national data sources for school development purposes?</i>
Coffee		
<i>Closing session: Moving forward with Estonia's Education Strategy 2035</i>		
		Implementing and monitoring Estonia's Education Strategy 2035
		General comments on breakout room findings
15:45-16:30	14:45-15:30	Indicators: what next in Estonia, MoER Closing remarks by Beatriz Pont, OECD Closing remarks by Thomas Pritzkow, European Commission DG REFORM

A proposed set of indicators and guidelines for education monitoring in Estonia

Executive summary

This summary presents a proposed set of indicators and guidelines for education monitoring that align to Estonia's Education Strategy 2035 which is now in process of development. It is part of the final outputs of the project "Enhancing data-informed strategic governance in education in Estonia" for the Estonian Ministry of Education and Research (MoER). The project is funded by the European Union through the Structural Reform Support Programme, and implemented by the OECD in partnership with the European Commission. It has been prepared by the OECD based on information provided by the Estonian Ministry of Education and Research (MoER) about the draft Education Strategy 2035, on the analysis and outputs developed for the agreement, including primary information and feedback collected from Estonian education stakeholders and periodic exchanges with Estonia following updates in the Strategy. The full report, to be published in Q2 2021, provides a comprehensive perspective of the proposed indicators and how they have been developed. It aims to inform Estonia as it prepares to implement its strategy and to set up the monitoring system to gauge its progress.

Estonia's monitoring system from a comparative perspective

Monitoring and evaluation of education systems play a vital role in informing policy planning and contributing to education system improvement. To this end, availability of relevant information and data on education system performance at different levels is important to understand how students and education institutions perform and progress. While data alone cannot drive performance, it can be aligned to educational objectives and priorities at national, regional or local level to guide those involved in the education system and focus stakeholders on the major goals and challenges in the education system as a whole.

Estonia is one of the most successful education systems among OECD countries when analysing its PISA performance. It has a highly decentralised education context where school autonomy is built on shared responsibilities and trust, with the support of a high quality teacher profession. The development of a new Education Strategy geared towards 2035 to respond to emerging challenges also provided an opportunity to review Estonia's education monitoring system (EMS).

Estonia has effective tools to support its system monitoring, such as cyclical and well-integrated national student assessments and a cutting-edge education management information system (EHIS). The country also has a high level of data development capacity, and can build on this rich data availability to define an indicator framework to monitor progress with the Education Strategy 2035.

Estonia can draw insights from Denmark and the Netherlands. The Dutch accountability framework ensures that school external evaluation, based on a careful desk-based risk analysis using school-level student performance data, results in observable steps for school improvement. A Data warehouse and the Windows for Accountability present national profiles in Denmark and growth trajectories in the Netherlands, which allow school comparison with peers.

A school perspective

Estonia can build on its strong stakeholder engagement processes to ensure that system monitoring responds to the needs of education stakeholders, especially schools, and is implemented effectively across the country. A survey of teachers, school leaders and local education administrators in a sample of Estonia's schools provided relevant insights:

Overall there is uncertain understanding of educational data concepts. While schools consider their own data to be the most relevant there is agreement on the need to integrate data collected at school and local levels with data for national purposes. Survey data was perceived of little relevance in schools for school improvement and teaching practice improvement, also because they did not feel ownership of it and school professionals found national strategies and indicators disconnected from school-level practices reporting and evaluation).

A number of suggestions were made to support schools to develop their improvement culture, and use varied data for school improvement; to integrate, in teacher and school leader training, data-literacy and teacher inquiry components; to integrate data on student level progress, class/course level performance and school level processes, and consider them in perspective with strategic goals; and to adapt where possible existing tools such as Haridussilm and the Digital Mirror to school needs.

Estonia's Education Strategy 2035

Estonia's efforts around the design and monitoring of the Education Strategy 2035 is a testament to the country's commitment to education excellence and continuous improvement. The Strategy aims to go beyond strict education performance: it aims to equip the population of Estonia with the knowledge, skills and attitudes that prepare people to fulfil their potential in personal, occupational and social life and contribute to the promotion of quality of life in Estonia, as well as global sustainable development. To achieve this vision, the Strategy sets out three strategic goals:

1. Learning opportunities are diverse and accessible, and the education system enables smooth transitions between different levels and types of education.
2. In Estonia, there are competent and motivated teachers and school heads, a diverse learning environment and learner-centred education.
3. Learning options are responsive to the development needs of society and the labour market.

A comprehensive set of actions are also planned in the Strategy, in pursuit of the goals and objectives. These are reviewed in detail in the next chapters in relation to the indicators.

Guidelines for developing indicators to monitor the strategy

Reaching the goals in Estonia's Education Strategy 2035 will largely depend on the country's capacity to select, retrieve and analyse relevant data to inform stakeholders' decisions; and on the way it engages with them to take action following this information. The OECD analysed the Education Strategy in order to ground its proposed indicators on the possibility to implement the monitoring system and proposes a set of guidelines for monitoring of the education strategy:

1. The EMS and indicators need to be aligned to the strategy and its vision: As a roadmap for Estonia's education, the Education Strategy 2035 vision is what gives meaning to education monitoring, while the strategic goals, objectives and action trajectories set out in the Strategy further guide monitoring processes to measure concrete progress on the various indicators. One indicator by itself does not provide enough information for a decision-maker. The alignment in the strategy from targets to action is a prerequisite for sound implementation as it ensures coherence in the objectives of the education monitoring system.
2. Indicators need to be relevant to stakeholders who will be using them: Overall, for the education strategy to be implementable, it is important to consider how the indicators will engage the professionals in schools and in adult learning more broadly to take concrete actions to achieve the objectives.

3. Overall performance and coherence between indicators should be maintained: Indicators should cover all components of the indicator framework (input, process, output), to allow for a holistic analysis of the determinants of educational performance. It is also important to ensure that there is coherence around the policies that are included in the strategy and that the indicators reflect this.
4. Actionable indicators should be part of the strategy: The indicators should be streamlined and avoid overlap across different targets if they are to be clearly understood.

A proposed set of indicators

The OECD developed the proposed set of indicators following a set of processes. It reviewed Estonia's previous strategy and draft new strategy and its strategic and programme indicators and applied a SMART (Specific, Measurable, Actionable, Relevant, and Timely) framework to the selection of indicators. The analysis also reviewed the indicators to ensure they cover the different components of the education strategy and aligned them to an input, process, outputs model that can enable the analysis of how the different elements contribute to attain the objectives of the strategy. This process of aligning Estonia's Education Strategy 2035 using the OECD's frameworks has helped clarify the types of information and indicators needed to monitor the progress and achievement of the Strategy. In particular, it helped clarify the policy issues, education levels, and units of observation required to monitor progress with each of the outcomes, as well as potential data gaps. The data mapping exercise also helped clarify the level at which each of the outputs should and can be monitored (even if all data is then aggregated to the national level).

The proposed set of indicators to monitor Estonia's Education Strategy 2035

	Indicator	GO/SG(1)	National/ local level	School level	Data gaps between existing and recommended indicators
Input	Expenditure in education		X		
	Teaching profession valued in society		X	X	Data collected at national level every 5 years through TALIS – would need to be included in regular national surveys to have data at school level and annually
	Teacher collaboration		X	X	
	Teacher salaries	GO 7	X		Comparison with the salary of similarly educated workers
Process	Teacher support		X	X	Data collected at national level through PISA – would need to be included in annual national survey to have data at school level and annually
	Pre-schooling	SG 1.3	X		Include enrolment from age 3 until entry to primary school
	Completion / drop-out rate	1.2.1 / 1.2.2	X	X	Capture completion and repetition in addition to drop-out rate
	Short-term learning mobility	SG 1.4	X	X	
	Education personnel practices		X	X	Data collected at national level through TALIS – would need to be included in regular national survey to have data at school level and annually
	Work experience when studying		X	X	Eurostat data, last data from 2016 and next in 2024. Eurostat is currently testing the inclusion of new variables in the annual LFS survey of work experience at a work place, which would allow more frequent measurement of this indicator
	Adults in lifelong learning	GO 3	X		
Output/Outcome	Subjective well-being of participants	SG 2.3	X	X	Other dimensions of well-being such as physical well-being should also be added. Monitor every year (instead of every 3 years) for teachers.
	Educational attainment	SG 1.1/1.2 & GO1	X		
	Student performance	SG 2.1/2.4 GO 6	X	X	Current data available is from PISA, monitored every 3 years at national level only. To monitor this indicator at other ages, at school level, and more regularly, it is recommended to use the national tests (for grades 3 and 6). Investigate the inclusion of a broad range of competences, such as literacy, sciences, mathematics, ICT (SG2.2 & 2.3.1), or Estonian as a foreign language (2.2.4).
	Collaborative problem solving skills		X	X	From PISA 2015, not collected on a regular cycle. Questions may be integrated in national assessments for timelier measurements.
	Self-directed learner	GO 5	X	X	
	Global competencies		X	X	From PISA 2018, not collected on a regular cycle. Questions may be integrated in national assessments for timelier measurements.
	Effectiveness of education personnel practices		X	X	Data collected at national level through TALIS – would need to be included in annual national satisfaction survey to have data at school level and annually
	Teacher retention	SG 2.5	X		
	Digital competencies	SG 3.2	X	X	
	Employed recent graduates	SG 3.1	X		
Employment in growth areas of Smart specialisation	GO 4	X			

(1) OG: Education Strategy 2035 General Objectives; SG: Strategic Goals.