

REPUBLIC OF ESTONIA
MINISTRY OF EDUCATION
AND RESEARCH



Implementing Education Policies

Enhancing data informed strategic governance in education in Estonia

Output 1.4.
Note summarising the stakeholder seminar

27 May 2020

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1 Introduction

This note constitutes the Output 1.4. of the project “Enhancing data-informed strategic governance in education in Estonia”, based on an agreement between Estonia, the OECD, and the European Commission’s DG Reform to support the development of the Estonian Education Monitoring System. The note has been prepared by the OECD and updated with comments by the project Advisory Group.

The note summarises the discussions of the stakeholder seminar that took place online on 27th May 2020. Section 2 describes the event, and Section 3 presents the Estonian context. Sections 4 and 5 bring an international perspective as experts from Denmark and the Netherlands present monitoring practices from their country. Section 6 details the OECD mapping exercise, and Section 7 summarises the table discussions focusing on the indicators supporting the Estonian Education Strategy 2014-2020.

2 Description of the event

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 is finalising the Education Strategy 2035, reaching the goals will largely depend on the country's capacity to select, retrieve and analyse relevant data to inform stakeholders' decisions.

The Ministry of Education and Research (MoER) has identified four key shortcomings in the current education monitoring system:

- The fragmentation and lack of coherence of the current sub-systems of monitoring (e.g. between self-evaluation, school improvement planning, external evaluation), which hinders policy coherence and does not support efforts towards school improvement and learners' progress;
- The lack of agreement on what are meaningful indicators to monitor key education information, including the quality of teaching and learning, the risk of low achievement, the progress of educational institutions regarding strategic objectives; and the need to define social-economic background and develop indicators to monitor the impact of socio-economic background on learning pathways and learning outcomes.
- Limited knowledge and skills of several key stakeholders in data analysis and use, including of parents and learners themselves;
- The need for advice on addressing issues of data management and use, including matters of privacy, ethics and risks mitigation.

In order to design an effective education monitoring system that addresses the above-mentioned issues, the Estonian Ministry of Education and Research requested technical support from the Directorate General for Structural Reform Support (DG REFORM, formerly Structural Reform Support Service, SRSS) of the European Commission. DG REFORM selected the OECD as implementing partner to provide Estonia with the relevant expertise and stir the process over one and a half year to eventually produce a coherent and comprehensive set of recommended indicators and monitoring principles aligned to Estonia's Education Strategy 2035.

The project is a co creation process that relies on the specific OECD expertise, the analysis of relevant practices from EU Member States and regular consultation and validation sessions with national stakeholders. The objectives of this seminar is to engage Estonian education

stakeholders in the process, by introducing them to relevant international experiences and gathering their feedback on the current and future monitoring of the education strategy. In particular, the seminar will bring together different actors involved in education monitoring, such as Ministry officials, school owners, school principals, teachers, etc.

During the seminar, participants are therefore expected to provide feedback and actively participate in discussion, as they will come together to:

- **Analyse** with OECD and international experts monitoring systems in a comparative perspective, and the proposed OECD framework to guide monitoring in Estonia.
- **Discuss** key indicators of the Estonian monitoring systems based on the preliminary findings presented by the OECD.
- **Propose** new indicators that could help monitoring the new Education Strategy 2035.

Table 1. Agenda of the stakeholder seminar, 27 May 2020

Tallinn time	Paris time	Activity	
9h30-10h00	8h30-9h00	Signing in to the seminar	
10h00-10h10	9h00-9h10	Welcome and introduction by Mart Laidmets, Secretary General of the MoER	
10h10-10h20	9h10-9h20	Introduction by Patricia Pérez-Gómez, DG Reform, and Beatriz Pont, OECD	
<i>Thematic session 1: Education monitoring systems from a comparative perspective</i>			
10h20-11h00	9h20-10h00	Working session 1: <i>10 min presentations, 10 min Q&As</i>	The Estonian education monitoring system: current situation and future trends, and an OECD perspective Tatjana Kiilo, MoER, and Pierre Gouédard, OECD
11h00-11h15	10h00-10h15	Coffee break	
11h15-11h45	10h15-10h45	Working Session 2: <i>15 min presentation, 15 min Q&A</i>	The Danish education monitoring system Jon Jespersen, Danish Ministry of Education
11h45-12h15	10h45-11h15	Working Session 3: <i>15 min presentation, 15 min Q&A</i>	The Dutch education monitoring system Renze Portengen and Jos Verkroost, Dutch Ministry of Education
12h15-13h30	11h15-12h30	Lunch break	
<i>Thematic session 2: The Estonian education strategy</i>			
13h30-14h00	12h30-13h00	Working Session 4: <i>20 min presentation, 10 min Q&A</i>	Presenting an original OECD Monitoring Framework Mapping the Estonian education strategy to the OECD framework Manon Costinot and Corinne Heckmann, OECD
14h00-15h00	13h00-14h00	Working Session 5: <i>15 min presentation, 45 min table discussion</i>	A proposed set of indicators to monitor the Estonian education strategy Manon Costinot and Corinne Heckmann, OECD
15h00-15h15	14h00-14h15	Coffee break	
15h15-16h00	14h15-15h00	Working Session 6:	Plenary discussion on the outcomes of Working Session 5 Tatjana Kiilo, MoER
16h00-16h15	15h00-15h15	Wrap-up session	

3 Working Session 1: Estonia

Presentation

According to the Programme for International Student Assessment (PISA), the Estonian educational system allies quality and equity. In addition, it manages to do so with relatively low spending compared to other OECD countries (OECD, 2019^[1]; OECD, 2019^[2]).

One characteristic feature of the Estonian system is a high level of decentralisation: Estonian schools have less autonomy than their OECD counterparts in only 1 of the 11 items characterising autonomy in the Teaching and Learning International Survey (TALIS) (OECD, 2020^[3]).

Against this backdrop, the MoER considers it is critical to improve data-informed decision making at the local level, as a necessary step to achieve the Education Strategy 2035. According to the OECD framework for system monitoring, an effective Education Monitoring System (EMS) serves a dual purpose of development and accountability, as it strengthens evidence-based decision-making (OECD, 2019^[4]).

The three components of the Estonian EMS are the following:

- Goals: the Estonian Education Strategy 2035
- Indicators: the key indicators to support the achievement of the Strategy
- Tools: the national assessments, EHIS, Haridussilm, Innove publications

During the OECD country visit in November 2019, stakeholders provided feedback on the different tools of the EMS:

- Despite the “only ask information once”, schools face overlapping data collection processes.
- Schools and school owners may benefit from local guidance on what are the expectations regarding their use of the EMS, how the different elements of the evaluation and assessment framework connect with each other, and what are the objectives to pursue locally.
- School principals and teachers feel that the burden of the data collection does not match the return they get from the analysis of these data. They prefer to develop their own data analytics to answer their needs. This repetition of the data collection / data analysis process is a source of inefficiencies.
- Parents and students express concern regarding the focus on indicators that can narrow down the holistic purpose of education.

Accordingly, the MoER can consider the following points to further develop the Estonian EMS:

- The MoER could consider the development of an overarching strategy for data collection and data use to avoid overlapping processes.

- A clear framework detailing the elements of education quality control and school improvement, the expected roles of education stakeholders, and the associated use of the EMS would strengthen evidence-based decision-making.
- Professional development (for school owners, school principals, teachers, parents, and students) on the use of the EMS should be available.
- Fostering school engagement is critical to boost the use of the EMS. This implies to:
 - improve the data collection process for schools to make sense of it
 - allow schools to co-shape the EMS to develop their ownership
 - exploit the richness of data to create added-value and tailor analysis to schools' needs
 - spread best practices.
- The development of indicators to support the achievement of the new Education Strategy should also encompass non-cognitive abilities to avoid narrowing down the scope of education.

Discussion

It seemed that the OECD have been mapping strategic education monitoring practices. Did this exercise result in any written overview and if so, can stakeholders access the results? Did you look for good practices regarding steering higher education as well or did you focus only on general education?

- The OECD has put Estonian monitoring practices in perspective using Danish and Dutch examples in a short note at the beginning of the project. The MoER will create a webpage to release material for stakeholders to follow-up on the project. The project mostly focuses on general education, VET, and ECEC.

What are the different kinds of engagement mechanisms you have seen?

- In the OECD implementation framework, stakeholders' engagement is pivotal in the elaboration of a coherent strategy. Due to the increasing complexity of education governance, it is important to involve stakeholders in decision-making to design feasible policies. Overall, the OECD considers that engaging stakeholders in Estonia would have positive effects, but did not list specific engagement mechanisms, as they are issue-dependent. However, the consultation process and the work of the expert groups on the future education strategy are already very interesting engagement mechanisms.

How are numbers and indicators important regarding measuring the performance of schools?

- Indicators must be used in a balanced manner. On one hand, they support accountability and monitoring progress, inform decision-making and thus can steer development. On the other hand, they may narrow down the scope of learning as the role of school goes beyond the mere development of cognitive, and easy to measure, abilities. How much a country relies on indicators is also a society's choice.

When the OECD looked at the different approaches to evaluation, did they consider different approaches to trust and control / accountability?

- The OECD tries to have an agnostic approach when it visits a country, and understand the specific context rather than imposing an international standard. In Estonia, the high level of teacher professionalism and the trust-based society make the existing loose accountability system sufficient.

How are other countries measuring the complex issues such as adopting constructivist teaching practices at the school level, supporting students to become self-directed and lifelong learners?

- This will be discussed in the afternoon sessions focusing on indicators.

As most of the general education schools are owned by the local governments in Estonia, is your suggestion to enhance the engagement of local governments within the process of setting and monitoring indicators or you really meant making more sense of national indicators for schools/at school level?

- Local governments can always keep national averages as a benchmark if necessary. However, given the high-level of decentralisation in Estonia, logic advocates for computing local indicators that reflect more closely the context, and should inform decision-making to reach context-dependent objectives. This is possible due to the quality and granularity of available data in Estonia.

4 Working Session 2: Denmark

Presentation

Education is compulsory in Denmark between ages of 6-7 and 16. The public schools (primary and lower secondary schools) are the responsibility of the municipalities, and regulated by the Folkeskole Act, which provides the overall framework for the schools' activities.

78,8 % of the students attend public schools, in 98 municipalities, 1 262 public schools

In 2014 school, a school reform with three main goals was introduced:

- The public school must challenge all students to reach their full potential. All students must be challenged according to their academic level.
- The public school must lower the significance of social background for academic results.
- Trust in the school and student well-being must be enhanced through respect for professional knowledge and practice in the public school.

Education monitoring in Denmark has a dual purpose. First, it aims at risk based monitoring to ensure accountability and quality development. Second, it aims at monitoring to learn, adjust and evaluate political initiated changes and monitor the system. It is based on quality indicators and data stored in the data warehouse.

The key elements of Education Monitoring in Denmark include:

- **Dialogue-based quality inspection:** it follows three monitoring/inspection tracks:
 - Risk-based monitoring – indicator based screening
 - Thematic inspection (e.g. compliance with specific regulation)
 - Single case inspection

Municipalities and schools with continuing challenges are offered guidance and support from learning consultants (mostly experienced teachers and leaders working part time in the National Agency for Quality and Supervision). As a last resort, the Minister for Education can impose a blueprint for improvement, or close a school.

- **Municipal quality reports:** The individual municipal boards must prepare a quality report every two years. The municipal council also uses a soft performance management tool, which consists in systematic conversations several times a year between administrations and schools, based on data on students' academic performance and well-being. It is mandatory for municipalities to draw on the data included in the data warehouse (Table 2).
- **Annual status report** from the ministry on the development of the school reform
- **Evaluation and research program** (10 million euro from 2014-2020)
- **International assessments** (PISA, TALIS, TIMSS, PIRLS, ICILS and ICCS)

Table 2. Indicators in the datawarehouse

Indicators	Definitions
Scores	Grades in elementary school and averages, and grades for the socio-economic reference
National tests	Results from the compulsory national tests in Danish and mathematics
Application and transition to secondary education	Applications for 10th grade and secondary education, figures for educational readiness assessments, as well as transition rates for 10th grade and secondary education
Number of pupils	Number of pupils in compulsory school, among others by type of school, grade level and municipality
Wellbeing	Student well-being and general school well-being
Absenteeism	Students' school absenteeism, due to absence of permission, illness, or illegal absenteeism
Teaching	Scheduled teaching hours, proportion of teaching covered by teachers with the adequate teaching skills in the subjects
Staff and finance	Number of employees, students-teacher ratio, proportion of staff working hours spent with students and the cost of primary school per student

The starting point for the quality-based inspection is the nationally determined goals for the public schools. These indicators are an expression of current regulation, politically determined objectives and targets. Main indicators for monitoring in Denmark include:

- Results from the 9th grade exams in Danish, mathematics, English and physics / chemistry
- Transition to secondary education
- Socio-economic reference – results compared to expected results based on the socio-economic composition of the school
- Results from national tests in reading and mathematics
- Results from the compulsory national well-being survey

Discussion

Can one see ranking lists of schools based on these indicators?

- In principle, the government does not provide the ranking of schools. For instance, the results of the national tests are not provided in ranking lists. Unfortunately, the newspaper compute the rankings.

Who computes the socio-economic reference of the school?

- The socio-economic reference of the school is prepared by the statistical office of the Ministry. They have different statistical models for public schools, vocational education, and upper secondary education, and they are presented on the website of the Ministry. The Ministry uses this socio-economic reference when comparing results or completion rates, as those are highly dependent of the socioeconomic background in Denmark.

What data is used for categorizing schools to different socio-economic groups?

- Denmark does not categorise schools in different categories. However, it is possible in the Datawarehouse to compare a school to a cluster of similar schools.

How you motivate students to answer the questionnaire - a 40-question questionnaire is a long questionnaire?

- It is mandatory for schools to organise, and for students to answer the questionnaire. However, they can always answer to a question “I don’t know” or “I don’t want to answer”.

How have the different responsibilities on different levels been communicated, accepted and followed/fulfilled by different stakeholders?

- They are very traditional, part of the Constitution, and there since a long time. However, there still can be some confusion on the different responsibilities, as in any system.

How is the well-being survey used?

- The well-being survey is a tool that follows a dual purpose. First, it allows the school principals and teachers to monitor aggregated results at the class and school level. They can then follow-up to improve results. Second, it is an instrument to monitor well-being at the national level and feed into specific research programmes.

Why the Ministry does not use financial indicators for assessment, like average teacher salary?

- Municipalities have their own management system, where they can set their own indicators (teacher sickness, economic information etc.). The Ministry does not have a lot of financial indicators on public schools because they are financed locally by municipalities.

Are in Denmark some rules to protect the schools from political pressure of the school owners?

- There is in the legislation a clear definition of the school owner’s prerogatives. In general, municipalities are responsible for financing public schools and responsible for the school system. There is not much legislation for protecting the school from the owner. Conversely, the school owner is accountable for the education quality, and must engage in a regular dialogue with the school to control it.

Do you have indicators to monitor the progress made by schools in national assessments? This might be especially relevant for schools dealing with a less privileged population.

- There are indeed indicators monitoring these progress. They are formulated in a way such as “every year we should see a progress of...” The goal is to have a progress each year in the national test and in the well-being survey. Denmark is also trying to observe these progresses at the individual level, but has not yet succeed due to the statistical complexity of the task. Contrary to the information pertaining to national exams, all the information on progress is publicly available.

5 Working Session 3: Netherlands

Presentation

The Netherlands have 17 M inhabitants, 6700 schools for primary education, 600 schools with department for secondary education, 60 schools for vocational education, 36 higher professional education, and 18 universities.

The Inspectorate of Education was created in 1801. Today, it has 528 full time employees, including 220 inspectors. The annual budget is 65 million euros.

Two main bodies play a role in quality control of education in the Netherlands:

- **School boards** are private legal bodies that are funded by the government. The board is ultimately responsible for the quality of education, and maintains to this end a policy aimed at guaranteeing and improving quality. It also ensures sound financial management.
- **The Inspectorate** supervises compliance with basic quality by the boards and schools. It operates proportionally and risk based, and performs stimulating supervision. In other words, it challenges to further development above the basic quality at board level in terms of quality assurance and financial management, and at school level, in four quality areas (results, development perspectives, didactics, safety).

The inspection framework consists of five quality domains with several 'quality standards' (Figure 1). There exists a clear distinction between standards based on national regulations, and 'other aspects of quality'. The framework is used for the different types of education.

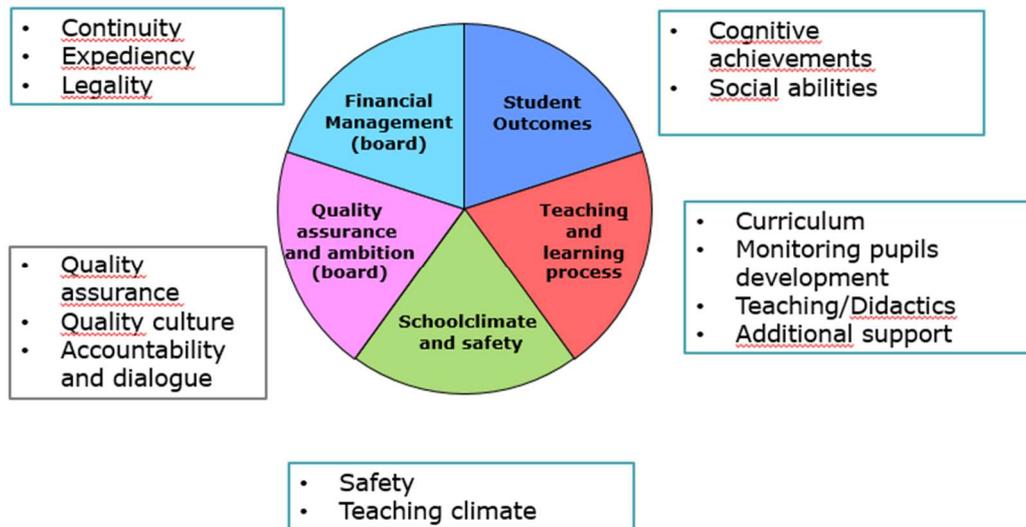
Before investigating a school, the Inspectorate uses numerous sources of information to draw a clear picture of the context and preparing the investigation:

- Enrolment of pupils/students
- Funding of schools
- Educational results
- Size of schools
- Composition of the workforce

In addition, the board and the school have to deliver regular documents that fed into the Inspectorate's knowledge base:

- Annual report
- School plan (some kind of strategic plan)
- School guide (short term plan of the school)

Figure 1. Elements (standards) of the framework



During the investigation at the school, the Inspectorate leads interviews with the board, teachers, management and specialist staff, students and parents. The Inspectorate also observes classroom practices and investigate the guidance system of the school (on paper or by the computer).

The inspection plan sets out which schools are to be inspected and what type of inspection they will undergo, as there are three types of school inspection.

- Verification inspection: information and management checks to get a picture of the school's overall quality. A reasoned sample of schools is selected for such inspections.
- Quality inspection of risk-affected schools: reveal whether or not the school is complying with the statutory requirements for the basic quality of its educational provision.
- Voluntary inspections of good schools: in that case, the school must justify this request beforehand with a thorough self-evaluation, clearly demonstrating why it stands out.

The inspection targets the four areas for quality (results, development perspectives, didactics, safety) and leads to a final judgment: very weak, insufficient, and sufficient. If the school is judged "very weak", the Inspectorate addresses a recovery order to the school board, demanding improvement within a year. In particular, the Inspectorate details what needs to be done better, and organizes one or two meetings with the board and school principal during the year about remedial interventions. The school will be evaluated again after one year to assess progress made. The Inspectorate's investigation results in a report addressed to the school and its board articulated around 3 elements: what goes well / what can be done better (stimulating above the norm) / what needs to be improved (insufficient elements). There is also a summary in a less technical language for parents.

The Inspectorate publishes on its website diverse information to inform stakeholders:

- **At the board / school level:** quadrennial investigation reports of the boards (mentioning verification studies of the schools), judgements of the investigations on good schools and schools at risk, including a list of weak schools.
- **At the country level:** the annual state of education, the annual financial state of education, various reports on current themes, such as language education, citizenship education etc.

Discussion

Is there a specific "instrument" that you use to measure school quality culture as it is a very complex assessment?

- The standard used by the Inspectorate is a combination of several elements, such as the capacity level of the personnel at the school board, the establishment by the board of a school supervision council, and the effective running of this council.

Since when have Dutch schools been run by school boards? How is a schoolboard formed?

- In the past, part of the schools were run by municipalities and the central government, and another part was run by school boards. Now almost all schools are managed by a school board.

Is being in the list of weak schools problem for parents, how do they react?

- Indeed sometimes, some parents would remove their children from the school. But in other cases, when there are no other schools in the area, it gives incentives for parents to stimulate the school and invest in monitoring the quality of education.

How are the students involved with the schoolboard work?

- Actually they are not.

6 Working Session 4 and 5: Indicators

Presentation

The OECD mapping of the Estonian Education Strategy 2014-2020 follows a double objective: investigate the potential links/interdependency between different education objectives, and identify which indicators (existing/to be developed) could help monitor progress. This exercise led to three products:

1. Overview of the links between the different goals and outcomes in the education strategy
2. Thematic analyses on specific education objectives
3. Mapping of the strategic goals onto an OECD framework

Overview of the links between the different goals and outcomes in the strategy

The mapping presents the main interactions between the different goals and outcomes in the Estonian Education Strategy. This helps to answer the following type of question: in order to reach a given outcome, should we previously reach another one? Should some outcomes in the strategy be aligned?

E.g. Evaluating teachers and principals in outcomes 2.2 and 2.3 could help identify training needs, and therefore help reach outcome 1.3 (on the development of in-training programmes)

Thematic analyses on specific education objectives

Four thematic analyses are conducted on objectives that may not be associated to a specific goal/outcome in the strategy, but are nonetheless important for the MoER:

- 3 analyses focus on a specific key indicator: early leavers, digital competences, and attractiveness of the teaching profession
- 1 analysis investigates jointly several key indicators that are closely related: lifelong learning and labour market outcomes

The thematic analysis of the “Attractiveness of the teaching profession” aims for instance to answer the following questions: What outcomes need to be reached in order to increase the attractiveness of the teaching profession? What key and goal indicators could help monitor progress towards meeting this objective?

Mapping of the strategic goals onto an OECD framework

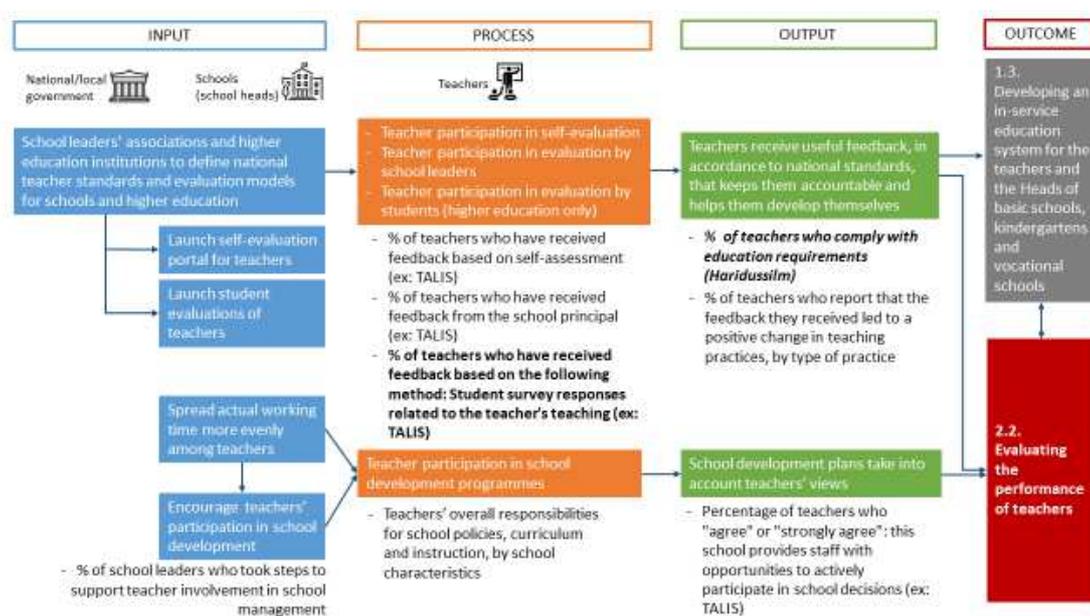
The OECD mapping framework organises indicators in terms of inputs / processes / outputs / outcomes. These represent the different potential steps needed in order to fulfil a goal in the strategy.

- **Input:** Measure of a policy action that can be directly changed by the actors in order to facilitate the process (e.g. *financing and/or creation of teacher training programmes*). Correspond mostly to the activities described in the strategy document.
- **Process:** Measure of the participation of actors in the process, especially thanks to the existence of the input (e.g. *participation in teacher training programmes*). What needs to happen or how must actors (e.g. teachers, school leaders, students) use the input given, in order to achieve the output?
- **Output:** Measure relating to the link between the input + process and the outcome (e.g. *training is useful to improve teaching in classrooms*). What is the desired goal of this input plus process?
- **Outcome:** The ultimate goal that is expected to occur if all the outputs are reached (e.g. *teachers are well prepared and good at their job*). In this case, the outcome is the accomplishment of the strategic measures established in the strategy (2.1, 2.2, 2.3 and 2.4)

The structure of input / process / output helps assess where the issue may originate from if an education goal is not reached (Figure 2):

- Input: Is there a lack of input (e.g. creation of teacher training programmes)?
- Process: A lack of use (e.g. participation in the training programme)?
- Output: Or a lack of quality and relevance?

Figure 2. Example of mapping for the Outcome 2.2: Evaluating the performance of teachers



Discussion

When analysing the goals set by the ministry (for instance teacher participation in self-evaluation), how do we know the selected components are necessary/important, is it based on the latest research to identify what really matters?

- This tool and possible indicators presented here are based on the current Estonian lifelong learning strategy, and are just an example of application identifying where there are some gaps in measures. The analysis of the important components is led at the Ministry in the Policy Analysis unit. They use different research sources to check whether the components are correlated in the way they assume.

Where can we see the indicators suggestions for all the 5 goals of the education strategy?

- The OECD prepared several documents that map the education strategy and list existing indicators and propose additional ones. These documents have been translated by the MoER and sent to participants. They should be available upon request.

How do you define the "good enough" level, meaning that an objective has been reached?

- This a methodological hypothesis: the OECD compares an Estonian result to an EU average, and wrote + if it is above the target, and ++ if the trend was also evolving in the direction expected by the strategy.

How well this work, grounded on the current Education Strategy, is transposable to the new 2035 Strategy?

- This work was initially supposed to target the new strategy, but as it is still under development, the focus shifted to the current strategy. However, there are overlapping objectives between the two strategies that allow for direct transposition. Moreover, the developed methodology goes beyond the identification of indicators, and discuss their implementation. This transversal approach will support future endeavours in the development of adequate indicators.

7 Working Session 6: Plenary session

Discussion

Participants of the seminar were sorted in 6 different break-out rooms to discuss what indicators and data could help monitor progress towards meeting strategic goals. Participants were asked to reflect on:

- Existing data and indicators (at the national and international level)
- Indicators that may need to be developed

The following subsections present the summaries of Estonian moderators on the discussion that took place in the different rooms.

Break-out room 1: Change in the approach to learning

“Change in the approach to learning” represents the most challenging objective of the Education Strategy 2014-2020. It is difficult to operationalise, and there is little to map on the inputs / processes / outputs framework. There is a need to develop new indicators to fill in this gap, using TALIS and the Estonian school satisfaction survey.

As the mid-term evaluation of the Lifelong Learning Strategy has pointed out, this objective has not been achieved due to the lack of common understanding of the concept among stakeholders. The lack of indicators for instance has not allowed focusing efforts on a specific goal, and measuring progress.

Within the Objective one, the group focussed on the outcome 5.1. “Ensuring the content and volume of studies is aligned to curriculum”, deemed the most problematic. The following ideas for indicators were proposed:

- Balance between theory and practice: in theory, we have conceptualised the desired approach to learning and know the problems with curriculum; now the necessary changes in curriculum and focus on teaching and learning practice are needed.
- Key competences are mentioned but not brought up in indicators:
 - measure coverage in general competences in teacher training (input) and teachers’ satisfaction with their competence for supporting the development of general competences (output),
 - measure general competences in planning and implementing school curriculum, and assessment of general competences of students (input, process, output; instruments for assessment of general competences of students are being developed),
 - existence of study materials, learning resources supporting general competences, subject integration etc., satisfaction of teachers with the materials.

- measure cooperation and wellbeing in school between all the actors – there are a lot of indicators, i.e from TALIS that might be incorporated in the new strategy:
 - involvement of students in goal-setting,
 - study methods,
 - school climate, wellbeing (now voluntary school satisfaction survey could be more popular if it were more relevant and valuable to schools).

A remark sent after the seminar mentioned that graduates' and employers' satisfaction with general competences of graduates could also be measured.

The development of these new indicators would require to start sorting all the existing potential indicators from TALIS and school satisfaction survey, and take a fresh look on the school satisfaction survey – how to make it more relevant for schools and from the perspective of learning.

A principle to remember is that a good indicator is valuable for all the stakeholders: MoER, local governments, universities (could contribute to indicators development, especially in socio-emotional wellbeing, assessment of key competences), schools etc.

Break-out room 2: Competent and motivated teachers and school leaders

This session started by considering if the following indicators, and their targets, were to capture goal 2:

- % of teachers under 30 years;
- competition for study places in teacher education;
- % share of teachers in general education by gender

We found that the indicator “% of teachers under 30” is not a good indicator due to different reasons. On one hand, the higher education student population is getting older and on the other hand, the number of career changers is increasing. It means that teachers who enter school system are older than 5-10 years ago. If we would like to monitor this indicator, we need to adjust it, e.g. replace the age 30 years and under with the age of 40 (for example).

Also, we need to define the core problem – it applies to all three indicators. Is it more important for us to have motivated and competent teachers or their age and gender? If our main aim is the first one, we should focus on it.

The “competition for study places in teacher education” indicator suggests that we should also pay attention to the number of study places, whether and how it has recently evolved.

Overall, we found that all these indicators actually measure attractiveness, not quality/how competent teachers are.

The session then focused on how to evaluate the performance of teachers and principals. One possible source is the TALIS survey (self-evaluation; teacher evaluation by school leader and by students). However, it only concerns lower-secondary level and is conducted every 5 years. Another possibility would be to evaluate teachers and principals using for example a 360-degree feedback and make an agreement at which level the evaluation should take place (state or local).

InnoVe already has a model of teacher's competences and 360-degree feedback for school leaders and teachers. It is available on InnoVe website, and free of use for schools and teachers. InnoVe also conducts a yearly satisfaction surveys for students, parents and teachers. This survey could for instance include some questions for teacher self-assessment.

In addition, a satisfaction survey for teachers is conducted every 3 years. It is voluntary and although there are questions that might help teacher in self-assessment, it is not the purpose of the survey.

Finally, the indicator “% of teachers who comply with education requirements” on Haridussilm should be updated for “% of teachers who comply with qualification requirements”. This label is broader and covers more aspects (including education requirements).

Break-out room 3: Concordance of lifelong learning opportunities with the needs of labour market

The strategic goal 3 relies on 5 strategic measures the participants have reviewed in turn.

1. The functioning of OSKA is monitored by indicators defined by the European commission, such as the number of meetings or the number of participants. These quantitative indicators condition the funding of the institution, but they do not measure the quality of the work, and interactions between participants.
2. Not discussed.
3. Work based learning (WBL) has been largely strengthened in Estonia, as demonstrated by the development of a WBL programme at the master level. Many pertinent indicators already exist, but a general comment will be detailed in the point 5.
4. The continued difficulty to attract student in VET track may have different causes: tradition, low image of workers and skilled working positions, social expectations, absence of strong trade unions, absence of qualification requirements for entry in most jobs etc. There is a need to identify / define indicators on these causes, to act on the appropriate levers to attract students. Existing indicators such as the salary rate and the employment rate after graduation, or the satisfaction with the 1st job are a start, but not sufficient.
5. We observe that many indicators are supply-side driven; there is a need to develop demand indicators. For instance, there were discussions at some point to have a satisfaction survey of employers, but this has not been finalised.

Overarching remark: the indicators associated with the labour market needs may be very short term driven. This should be carefully considered, especially at a time of automation. On one hand, it is important not to lose sight that education goes beyond providing workforce to the labour market. On the other hand, the development of indicators on transversal skills may be more relevant for the longer term. Employers have indeed already started to evaluate some, such as entrepreneurial capacity, capacity for change, ability to redesign career path, as these skills demonstrate a worker’s ability to fit in an ever-changing and uncertain environment.

Break-out room 4: A digital focus in lifelong learning

An expert from the Netherlands opened the session by remarking that even if the input / process / output framework is useful, how can it support the development of more intangible outcomes such as “incorporating digital culture into the learning process” (strategic goal 4.1). In addition, how can reasonable, meaning challenging but not impossible to reach, targets for indicators be set?

The digital targets are outcomes that emerge from the curricula, but measuring the digital culture at schools is indeed challenging. It mostly relies on the attitude of teachers and headmasters, although it is not clearly specified in the job description what is expected from them. The digital mirror is already documenting some of the current efforts undertaken at schools.

The strategic goals 4.2 and 4.3 could already be covered by available input data. There has been large investment in ICT devices, teachers and study materials. It would also be relevant to analyse how many schools have upgraded their local internet network and ICT infrastructure. Some of this information was already collected in 2017 and 2019 in a school self-assessment for the digital mirror. On the output front, indicators focus on those who participate in schools, but do not consider those who would choose ICT field in their next level of study. Indicators looking at the popularity of ICT and related study fields in VET and higher education level could be developed.

The pandemic situation has fastened the adoption of digital technology, and this should be reflected with school level indicators. However, it is not because digital learning resources exist that they are necessarily used. The use of digital learning materials should probably serve as process indicator.

Regarding the strategic objective 4.5 “creating learning opportunities for adults to acquire digital competences”, anyone in Estonia can access VET schools and get a certain level of digital skills. However, the needs are different between students and adults, and it would be interesting to align professional development to labour market needs. Statistics Estonia manages labour surveys, and could assess which skills are the most in demand, and what share of workers has recently participated in digital training.

Break-out room 5: Equal opportunities and increased participation in lifelong learning

An indicator related to adult education should be included to monitor this strategic goal. The acquisition of new skills through in-service training, or during work should be taken into account (VÕTA solutions - accreditation of prior and experiential learning). In addition, the link between education and the needs of the labour market should be strengthened.

Participants suggested continuing using language-related indicators as it is currently done. It would also be useful to monitor continuation in tertiary education (Russian-language schools and Estonian language school separately). Optimal use of space in educational institutions could be monitored, but the focus should be not just on the decreasing of square meters but also on optimization. Share of labour costs of governmental education expenditures and the share of teachers' labour cost were found irrelevant in this goal and they should be reflected in another goal.

The access to school was raised, and in particular how to avoid it being a reason for dropping out. Schools should not be too far away from students' home. The development of regional indicators may help understand equal opportunities in different sectors. In addition, there were suggestions for using indicators such as the share of students in the state upper secondary school among students in the region; and the dropout rate from basic school and upper secondary school. One proposal was to consider how to use the data collected by schools and communities themselves.

Break-out room 6: Key indicators

The session first addressed what are the most important indicators, and which indicators could be missing in the current education strategy. Indicators on satisfaction are the most important to identify what works in the system. Indicators on school climate and early leavers should be prioritised. Indicators on teachers' salaries could be replaced by teachers' resourcefulness, and not focus only on generational education teachers.

The general education law states that the quality of education is defined as inclusiveness, but there is actually no indicator measuring inclusion. The State audit office expressed the need to develop one.

Some key indicators are not that relevant to education, and could be removed from this shortlist: the employment rate is not the main goal for education, and digital competences are not an end.

The discussion then focused on the connection between key indicators and specific goals. For instance the ongoing “Changing approach to learning” represents a measurement challenge. Current developments in Estonia include individualisation and personalisation of the learning process, but indicators measuring these are still lacking. Some participants suggested that key indicators should not be linked to specific goals.

The development of stakeholder’s satisfaction indicators remains challenging, and participants discussed the main barriers. The definition of “satisfaction” is complex, and identifying the relevant stakeholders to get feedback from is important. In Denmark, satisfaction surveys target parents, teachers, and employers. In Estonia, the overall satisfaction for the educational system is high, but maybe some group of stakeholders are not that satisfied.

Looking back at the Education Strategy 2014-2020, participants consider it was a success, noting however that measures on early leavers and top achievers cannot evolve rapidly, and efforts should be pursued in the next strategy. Participants also consider that some of the targets were achieved thanks to external factors such as top up of resources or economic growth that contributed to employability. The fundamental issues that require deep changes at the school level have not yet happened and required sustained efforts.

References

- OECD (2020), *TALIS 2018 Results (Volume II): Teachers and School Leaders as Valued Professionals*, TALIS, OECD Publishing, Paris, <https://dx.doi.org/10.1787/19cf08df-en>. [3]
- OECD (2019), *OECD Reviews of Evaluation and Assessment in Education: North Macedonia*, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, <https://dx.doi.org/10.1787/079fe34c-en>. [4]
- OECD (2019), *PISA 2018 Results (Volume I): What Students Know and Can Do*, PISA, OECD Publishing, Paris, <https://dx.doi.org/10.1787/5f07c754-en>. [1]
- OECD (2019), *PISA 2018 Results (Volume II): Where All Students Can Succeed*, PISA, OECD Publishing, Paris, <https://dx.doi.org/10.1787/b5fd1b8f-en>. [2]