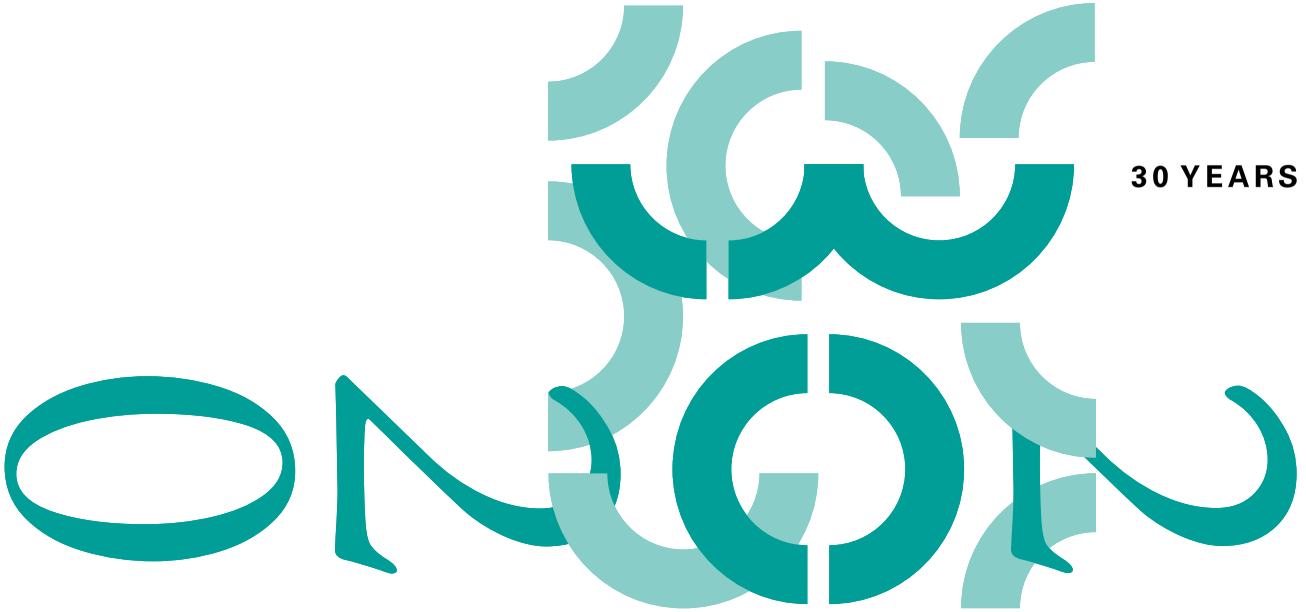

**30 YEARS** CIDREE

# YEARBOOK **2020**

## NATIONAL EDUCATION REPORTS IN EUROPEAN COUNTRIES

# NATIONAL EDUCATION REPORTS IN EUROPEAN COUNTRIES

CIDREE YEARBOOK **2020**

CIDREE
Consortium of Institutions for Development and Research in Education in Europe

SKBF | CSRE

# Imprint

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# Contents

# President's Foreword

**Hege Nilssen**
President CIDREE
Director General of the Norwegian Directorate for Education and Training

Despite differences in political systems and organisation of educational institutions, high quality and accessibility in the education systems is of great importance in all European countries. We aim for our educational systems to enable young people to learn, master and thrive.

A national education report is an important part of the quality system in the CIDREE member countries who have contributed to this report. The CIDREE Yearbook 2020 provides insight and a variety of examples of these reports, as well as how they can contribute to better education policy making. In the same way the education systems and political systems vary between countries, so do the form of their national reports. For instance, the periodicity, the organisation, the degree of digitalisation, the report's role in the political system and what parts of the education system are covered, are all aspects that may vary between the countries. In common they have the goal of attempting to understand important trends, differences between social groups and what characterises good educational institutions.

We believe that the result – the articles collected in the 2020 Yearbook – will provide inspiring discussions in CIDREE member countries. Despite differences in political and educational systems, we face many of the same challenges, such as balancing the demand of up to date figures and findings, with the need for high quality analyses that helps us understand. At its best, a national report can be a tool that joins knowledge and policy making to ensure a well-functioning education system.

The Covid-19 pandemic has affected the educational systems hard and challenged fundamental structures and previous knowledge. This emphasises the importance of a solid monitoring system and knowledge foundation through which these changes may be interpreted. There is reason to believe that the impact of closed schools and digital schooling for learning and inclusion will be important topics in future national reports. The CIDREE Yearbook 2020 is the yearbook for the 30th anniversary of CIDREE. The pandemic is the reason why we cannot meet physically for the launch of the yearbook and the celebration of the 30th anniversary of CIDREE. It will have to be a digital celebration for now, but I certainly look forward to assemble the CIDREE family together again.

On behalf of all CIDREE members, I would like to thank Stefan Wolter and Chantal Oggenfuss from the Swiss Coordination Centre for Research in Education (SCCRE) for taking the initiative to this year's interesting topic, as well as for the coordination and editing of the Yearbook 2020.

# Editorial introduction

**Chantal Oggenfuss*** **and Stefan C. Wolter****
CIDREE national coordinator*, Director**
Swiss Coordination Centre for Research in Education

The CIDREE Yearbook 2020 on national education reports in European countries provides an overview of seven national education reports and includes a contribution from the OECD on the implementation of evidence-based education policies.

The year 2020 has brought the unexpected to all areas of life and posed major challenges for all sectors of society. In the entire education sector, the COVID-19 pandemic meant that online teaching had to be implemented within a very short time and that answers had to be found to many questions relating to school closures. Unsurprisingly, those responsible for education want to know what this extraordinary situation means for pupils, what is the situation regarding equal opportunities, what consequences are to be expected for further educational careers, for admission to upper secondary education, for the quality of the final certificates assigned, for the labour market, etc. But what does this have to do with education reports and the monitoring of the education system? If the COVID-19 pandemic has made one thing clear in the context of educational monitoring, it is the need to collect evidence and to permanently observe the education system in order to be able to investigate the impact of an extraordinary event. It has also highlighted the conflict between the need to react to a current situation and to take evidence-based decisions for the future.

The CIDREE Yearbook 2020 on national education reports in European countries provides an overview of seven such reports: from Estonia, Germany, Kosovo, Luxembourg, the Netherlands, Norway and Switzerland.[1] It appears to be the first publication to provide an overview of several European national

education reports[2] and include an extract of each report. A contribution from the OECD complements these national reports, highlighting the ways in which an international organisation creates and provides comparative evidence and helps countries in implementing evidence-based education policies.

**What works? Evidence-based policy**

In most modern democracies, the concept of evidence-based policy is the generally widespread way of legitimising political decisions 'by reference to established and scientifically agreed knowledge' (Weingart, 2006, p. 36). The beginnings of a systematic use of evidence in policy-making date back to the 1990s, when British government officials promoted the use of independent scientific expertise. In this context, evidence is understood to be empirically proven knowledge about developments, their causes and effects, consolidated in the scientific community. These movements can be identified by 'the massive rise in the number of organisations seeking explicitly to advise or influence governments in their action' (Davies et al., 2001, p. 1). The reasons for the increased demand for evidence-based decision-making can be explained by a number of factors, including the growing educational attainment of the population and the related expansion of the research community and well-informed public, the rapid increase in data availability with the introduction of digitisation, and the public's demand for accountability of government institutions in terms of effectiveness and efficiency. Evidence on the question of what works gained more importance in all sectors of society, including the education sector (Davies et al., 2001).

However, research is not always taken into account in policy-making, even when relevant evidence is available. Since the conception of evidence-based policy, there has been a constant debate about how to make research results more accessible to politicians and decision-makers in practice. This has led to a variety of initiatives to improve the communication of empirical findings (Langer et al., 2016). Among other reasons, these developments have led some countries to establish a national education report as a key instrument for providing evidence on the education system. Besides the debates about the form of communication of research results, the discussion about what is considered as evidence is just as important (Cook & Gorard, 2007). This includes consideration of what is regarded as relevant evidence and as research of appropriate quality (Gough, 2007). The discrepancy between research and politics or practice is not always due to the fact that research is not considered. While research results from various sources are used in decision-making processes

of education, 'robust evidence from rigorous experimental trials has largely been lacking' (Fitz-Gibbon, 2001). However, it is precisely this kind of analyses that reveal causal relationships and enable conclusions about what works and how.

**Education reports in European countries**

Many countries were familiar with different forms of reporting in the field of education long before evidence-based policy was formulated (Maaz & Kühne 2018; see the article by the Netherlands). Some countries – Canada, England, Sweden, the Netherlands and the United States – had already installed empirically based system monitoring at a time when the notion of evidence-based policy-making was not yet known. In other countries (e.g. Austria, Germany, Switzerland), national education reporting was established in the 2000s – not least in response to the so-called PISA shock, but also to provide a framework for evidence-based policies (Maaz & Kühne, 2018).

In most of the CIDREE member countries, governments are obliged to ensure the high quality and accessibility of the education system. Some of these countries have a national education report as a tool to fulfil this duty. The education reports are often seen as the key pillar for evidence-based education policy and for fulfilling the mandate of quality assurance. In most cases, it serves the purpose of gathering, compiling and analysing information about all education levels as well as the transitions between the levels of the education system and about its environment in a systematic and scientifically sound manner. What is the basis for deciding how many mathematics lessons should be taught? On the basis of which information is it decided whether the admission criteria for a specific educational level serve an overarching goal? How do the educational careers of students with different sociodemographic characteristics look?

How is the evidence that serves as a basis for educational practice and policy provided in the individual national education reports of these CIDREE member countries? How can each report be characterised and what are its main features? How is it disseminated so that it is useful and accessible to policy makers, educators, and the public? To address these questions and to enable an exchange on the national education reports of CIDREE member countries, Switzerland held a CIDREE Expert Meeting in 2016 (organised by SCCRE) on national education reports in European countries. Its focus was on the procedures and characteristics regarding national reports on education. The project

leaders of five national education reports provided detailed, country-specific information on their particular national education report and its background. This served as a basis for a comparative overview of the national education reports compiled and presented by SCCRE (SCCRE, 2018) at the second meeting hosted by the Scottish government in 2017. On the one hand, the presentation was regarded as a quality control because the feedback from the experts was incorporated into the comparative work and thus provided an opportunity to highlight and discuss the different concepts of the national education reports. On the other hand, the presentation was an opportunity to share the knowledge with other CIDREE member countries and promote CIDREE activities beyond the member institutions: project leaders and experts from eight CIDREE member countries with and without a national education report attended the second CIDREE Expert Meeting and, as a non-CIDREE member but as a guest, the expert responsible for the German Education Report also participated.

The CIDREE Yearbook 2020 on the national reports on education in selected European countries is a special edition in four respects: it is the yearbook for the 30th anniversary of CIDREE and at the same time, due to adapting to digitisation and sustainability concerns, probably the last printed edition. It is also a CIDREE yearbook with guest contributions from Germany and the OECD, which we are particularly pleased about. But it is mainly and most importantly the result of several years of intensive and valuable exchange with the project leaders of various national education reports on the systematic way of collecting and analysing information on the education system. The project leaders and co-authors of the education reports from Estonia, Germany, Kosovo, Luxembourg, Norway, the Netherlands and Switzerland present the concept of their report in the CIDREE Yearbook 2020. Each contribution is structured along the same lines and contains a description of the institutional details, the function and the production process of the report. It also describes the dissemination of the report and plans for its future developments (see the first part of each contribution: description of the report). The second part of each contribution represents an important and significant extension in comparison with the previous exchange during the CIDREE Expert Meetings 2016 and 2017. It includes an extract from the current national education report and offers concrete insight into the way the information and evidence are presented in the report. The CIDREE Yearbook 2020 closes with one of two guest contributions – that of the OECD on the variety of approaches used by the organisation to support countries in developing and implementing evidence-based policies in education.

*Estonia*

Einar Rull from the Estonian CIDREE member institution the Education and Youth Authority (former Foundation Innove) presents the Estonian Lifelong Learning Strategy 2020 together with Maie Kitsing from the Estonian Ministry of Education and Research. It was implemented in 2014 and has been the central document in the Estonian education system ever since. The contribution focuses on the analysis of the Execution of Strategies 2018 of the Ministry of Education and Research. It is the annual review of all long-term development plans. The extract from the Estonian Lifelong Learning Strategy 2020 in the second part of the contribution provides an insight into the reporting of digital literacy issues.

*Germany*

The presentation of the German Education Report is a guest contribution by Kay Maaz, Stefan Kühne and Jessica Ordemann from the DIPF | Leibniz Institute for Research and Information in Education. The report has documented developments in education and has provided indicator-based information covering important aspects from preschool to adult education since 2006. The second part presents an extract of the German Report on Education 2020 about students' heterogeneous competence range when entering the lower secondary level.

*Kosovo*

Selim Mehmeti, Haxhere Zylfiu and Luljeta Shala from the CIDREE member institution Kosovo Pedagogical Institute give an overview of the annual evaluation report on the implementation of the Strategic Plan of Education for Kosovo. It is the main basis for fostering developments in education from preschool to university proved by the government and implemented under the leadership of the Ministry of Education, Science and Technology. The extract of the annual evaluation report 2018 in the second part shows the degree of implementation of planned activities under strategic objectives and comparison of parameters with OECD countries.

*Luxembourg*

The national Education Report for Luxembourg is a joint venture between Luxembourg's Ministry of Education and the University of Luxembourg presented here by Susanne Backes and Thomas Lenz from the University

of Luxembourg. The report, published since 2015, can be described as an author's report to which research teams contribute separate chapters. It combines official statistics and indicators with more complex, scientifically based quantitative and qualitative articles. The extract from the 2018 report provides examples of graphs and figures on inequality and disparities between students in Luxembourg.

*Netherlands*

Inge de Wolf, Tijana Prokic Breuer and Dorien Zevenbergen from the University of Maastricht and the Dutch Inspectorate of Education present the State of Education, which has been published by the Inspectorate of Education since 1817. The report reflects the major developments in education from kindergarten to university based on research. The extract of the report discusses the findings on equal opportunities in education. It is one of the most important criteria used in the systematic evaluation of the performance of the Dutch education system in the State of Education.

*Norway*

The Education Mirror, presented by its current editor Tonje Haugberg from the Norwegian CIDREE member institution Directorate for Education and Training, has been published since 2005. The report provides statistics and analysis on kindergarten, primary and secondary education by combining an annual update of the figures with research on key issues related to these educational institutions. The second part of the contribution presents an extract of the Education Mirror 2019. It contains some standard elements that can be found in every report and also elements concerning integration issues, the main topic in 2019.

*Switzerland*

Chantal Oggenfuss and Stefan C. Wolter from the CIDREE member institution Swiss Coordination Centre for Research in Education (SCCRE) present the Swiss Education Report which is established by the SCCRE. Since 2006, this report has been the main element of a comprehensive monitoring of the education system, from kindergarten to adult education, based on systematic, scientifically supported and long-term information processing. The extract of the Swiss Education Report 2018 shows how institutional details, statistics and research findings are linked in the report. The examples relate to language teaching, effects of instruction time, and the prediction of success at university using PISA results.

*OECD*

The second guest contribution is presented by Paulo Santiago from the Directorate of Education and Skills of the OECD. The overview shows the variety of approaches that the OECD has used over the past decades to support countries in developing and implementing evidence-based education policies. The wide range of products and services includes policy country reviews, diagnosis, dialogues, peer learning activities and implementation support. The contribution elaborates further the background, rationale and the methodological approach of the different offers of support.

**Conclusion**

The CIDREE Yearbook 2020 shows how European countries collect and compile information on the education system in their national education reports and make it available to policy makers. This does not answer the question of what effect this method of evidence presentation has on the education system. However, there is still generally little evidence on how the information is used and with what gain or impact. But, this is a central concern for the further development of education reports and, more importantly, of education systems in general. A major project (EIPEE; see Gough et al., 2011), funded by the European Commission Directorate for Education and Culture, was carried out in 2011 with the aim of better understanding the linking between research findings and policy-making. The participation of 18 project partners from 11 countries showed the high level of interest and need for more in-depth knowledge on the subject. As a result an analytic framework was developed, which serves as a tool to evaluate and adopt linking activities. One of the five key recommendations of the project highlighted the importance of the relevance and quality of evidence. The former requires research agendas, the latter could be improved by systematic reviews of research to ensure a high level of completeness.

## Notes

[1] We regret that other countries, such as Austria, France, Scotland and Sweden, which also have a national education report, could not participate in the CIDREE Yearbook 2020 because of limited time resources.

[2] A working paper was published in 2018 as part of the CIDREE project National Education Reports in European Countries (SCCRE, 2018).

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# *National Education Report in Estonia – part of a digital ecosystem of reports*

## ESTONIA AT A GLANCE

- Population: 1.3 million
- GDP per capita: 38,463 USD
- Public expenditure on education: 4.1% of GDP
- Educational attainment (25–64 olds)

  Upper secondary/post-secondary (non-tertiary): 48%

  Tertiary: 41%

The figures refer to the following: population 2018, GDP 2019 current prices and current PPPs, public expenditure 2016, education attainment 2018 (tertiary includes short-cycle, BA, MA, PhD) Education at a glance, OECD (2019).

Estonia

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Einar Rull works as an analyst at the Education and Youth Authority. Einar Rull has been involved in projects of measuring achievement and value-added statistics in schools. He devotes a lot of time explaining to schools how to raise schools' value added and how the knowledge about the topic has evolved. Einar Rull is interested in evidence informed approach in pedagogy. He often speaks to teachers about evolutionary psychology, artificial intelligence, e-learning and e-assessment. He has welcomed numerous foreign delegations and shared the Estonian PISA success story. He also talks to guests about the application of digital technology in Estonian schools.

**Maie Kitsing**
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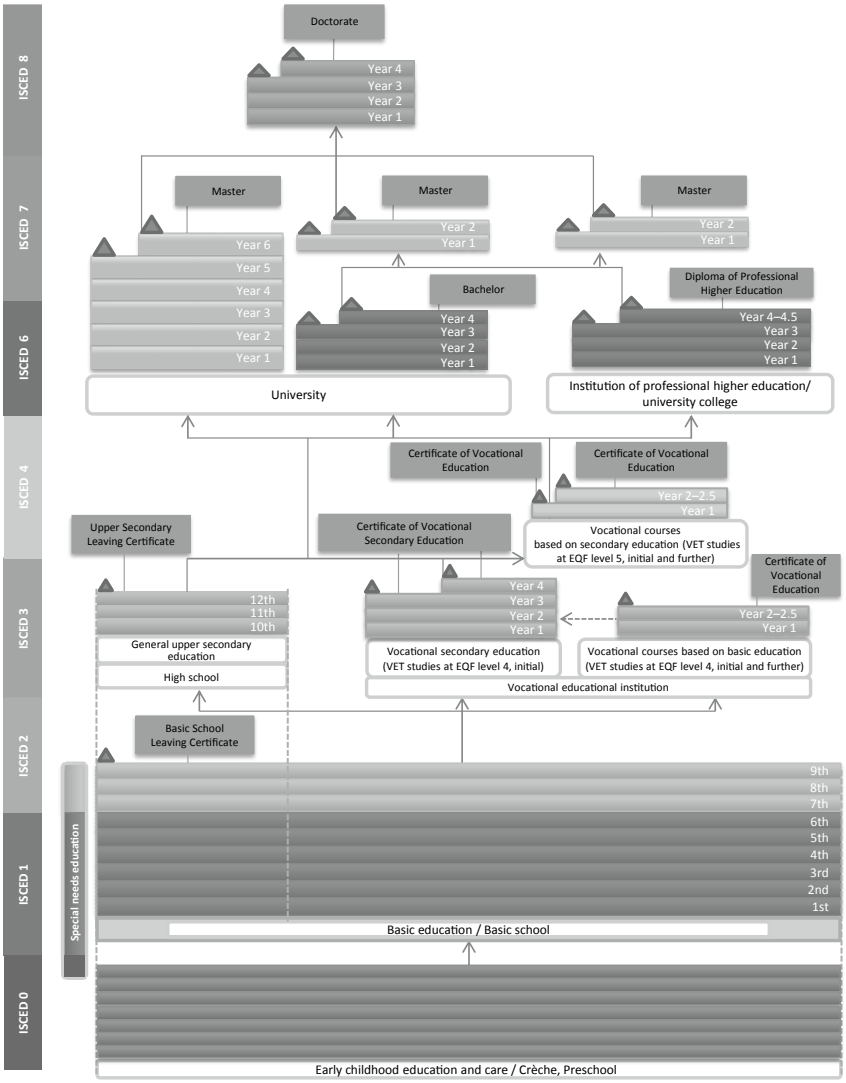
Maie Kitsing works at the Estonian Ministry of Education and Research. Her responsibilities include the coordination of the PISA Study and areas related to the evaluation of educational institutions. She is the Estonian representative in the PISA Governing Board. Maie Kitsing has worked on many international educational projects throughout her career. She has been an adjunct lecturer of education in the University of Tartu. In the last decade, Maie Kitsing has been engaged in scientific research. Her research topic is the interconnection between learning outcomes and microclimate of schools. She has written and spoken widely about Estonian education and introduced Estonian education.

# Abstract

The Estonian Lifelong Learning Strategy 2020 has been the central document to Estonian education since 2014. It reflects the consensus of society regarding targets in education. The strategy was initiated by civil society organisations such as the Estonian Cooperation Assembly and the Education Forum, finalised by the Ministry of Education and Research and approved by parliament. In addition, the ministry worked out strategic implementation plans and programmes. The contribution focuses on analysis of the Execution of Strategies 2018 of the Ministry of Education and Research. It is the annual review of all long-term development plans and is one of the central documents of the Estonian education. The aforementioned report includes timelines of different programme indicators, summaries of external evaluations of programmes, and recommendations given by independent evaluators. The structure of the document is analysed to enable comparison with corresponding documents from other CIDREE member countries that provide an annual overview of important developments in education. Based on this comprehensive document, a summary is produced to inform readers of the most important evidence-based decisions made for the next academic year 2019/2020.

# Education system



# Description of the report

**Institutional details**

The following Estonian documents will be discussed in the Execution of Strategies 2018 (MoER, 2019a) of the Ministry of Education and Research Analysis (MoER), and a shorter derivative, involving goals for the next academic year called the 'Most important activities in the academic year 2019/2020' (MoER, 2019b). Goals are set based on the data and findings of the extended document.

There exist an English language summary of the first document and exact translation of the second. The first document is named 'Summary of the Ministry of Education and Research's Annual Report for 2018' (MoER, 2019c) and the second document has the title 'Important Activities in the 2019/2020 Academic Year' (MoER, 2019d). The reports are available on the MoER statistics and analysis web page www.hm.ee/en/activities/statistics-and-analysis.

**Parts of the education system covered**

The Estonian education report may be viewed as the sum of two important reports. The Execution of Strategies 2018 (MoER, 2019a) is an annual review of all long-term development plans, which are implemented in all areas for which the Ministry of Education and Research is responsible. These areas are education (kindergarten, primary, secondary, vocational, university, hobby schools), research, youth policy, Estonian language policy, and state archives. They are all included in the first report. The report provides timelines of different programme indicators, summaries of external evaluations of the programmes, and recommendations given by independent evaluators.

The second report presenting the most important activities (MoER, 2019b) is concerned only with education, and sets targets based on the findings of the previous document. It highlights the main findings of the extended document and gives additional details regarding the key activities for the academic year 2019/2020 at all levels of the educational system. This shorter, well-illustrated booklet is convenient for everyday use in schools by teachers, principals, parents and others for communication of policy adaptations of ministry. The Execution of Strategies (MoER, 2019a) serves accountability purposes.

The intent of the extended document is to inform about the most strategically important topics in education, as determined by the Estonian Lifelong Learning Strategy 2020 (MoER et al., 2014), or included in other, more specific programmes, which are developed to support the implementation of the strategy.

The Estonian Lifelong Learning Strategy 2020 (MoER et al., 2014) was initiated by civil society organisations such as the Estonian Cooperation Assembly and the Education Forum and determines the choice of topics in the report. The assembly organised different discussion events, giving the floor to almost all interest groups in education. The strategy was later finalised in different ministerial meetings and approved by parliament. The annual format is provided by the ministry as a useful means of reviewing and assessing the accountability of programmes' indicators.

The Estonian Lifelong Learning Strategy 2020 programme (MoER et al., 2014) has five strategic focuses. They are change in the approach to learning; competent and motivated teachers and school leadership; concordance of lifelong learning opportunities with the needs of the labour market; digital focus in lifelong learning; and equal opportunities and increased participation in lifelong learning.

Based on this general strategy, the MoER has since drafted an implementation plan and supporting programmes, which are issued at the ministerial level.

The annual overview includes nine education programmes that involve different measures, and provides the structural backbone of the report as follows:

*General education programme*

Guaranteeing quality in general education

Creating equal opportunities for participation and for diminishing dropout rate in general education

Guaranteeing access to general education

*Vocational education programme*

Concordance of lifelong learning opportunities and labour market needs

Rising participation in lifelong learning

*Higher education programme (13% of the total MoER annual budget)*

Creating equal opportunities for participation and changing paradigms of learning

Concordance issues with the labour market

Increasing international competitiveness

*Adult education programme*

Bringing back former dropouts in order to complete their studies and obtain a formal education certificate

Improving the quality of, and access to, informal education

Developing the qualification framework and cooperation forms for the implementation of a lifelong learning agenda

*Digital focus programme*

Applying a digital paradigm to learning

Creating preconditions for the application of a digital paradigm in learning

*Competent and motivated teachers and school heads programme (35% of the total MoER annual budget)*

Developing a CPD system for teachers and school heads, and running it in university competence centres

Improving the public image of the teaching profession

*Learning and career counselling programme, involving 1) career readiness for future work, and 2) learning and behavioural difficulties issues in school*

Coordination and access to counselling services for children and young people

Developing and assuring the quality of support services

Raising public awareness of support services, demands of the labour market, and learning opportunities

*Harmonising provisions of learning with the demands of the labour market*

Harmonising provisions of learning with the demands of the labour market

*Adaptation of the school network to the geographical relocation of students*

Optimisation programme for the school network

**Periodicity of the report and rationale for reporting**

Analyses of all development plans are issued annually in a single report and reflect everything that is important in education and the ministry's other areas of responsibility. Periodicity derives from cycles of the government's financial-planning framework and gives the possibility to make changes on the basis of feedback in order to keep the implementation of programmes on-track.

The ministry uses procurement and selects a competent institution to provide an independent midterm formative evaluation of the execution of the Estonian Lifelong Learning Strategy 2020 (MoER et al., 2014) implementation programmes. Based on their independent expert analyses, they provide a critical overview and independent policy recommendations for necessary adjustments. Before finalising and releasing their proposals, external evaluators usually discuss their findings with corresponding interest groups. The reports of independent experts are made public and are integrated into this report in a more generalised way.

As a consequence, the results of midterm analyses are widely scrutinised in the media, and the minister, together with the ministry, propose their solutions. Additional financial assets may be provided, while some initiatives may be cancelled altogether. Recently, much attention has been paid to optimising the school network and on adult education, as well as the changing approach to learning, and digital focus in education.

Based on the midterm external analysis and government databases, the Execution of the Strategies 2018 (MoER, 2019a) is voluminous (192 pages).

Trends in the dynamics of the main indicators of the Estonian Lifelong Learning Strategy 2020 (MoER et al., 2014) are reported in the beginning of the executive summary in the section education. It highlights all significant positive and negative findings in 14 short paragraphs.

A detailed overview of performance in the area of education covers 118 pages, making it the longest part of the document. The section on education is divided into two larger sections. The first section is dedicated to a performance evaluation of the Estonian Lifelong Learning Strategy 2020 (MoER et al., 2014) with its five subsections. The second section is dedicated to the overview of the performance of the nine aforementioned educational programmes that support the application of the Estonian Lifelong Learning Strategy 2020 (MoER et al., 2014).

The report scrutinises the developments in the year 2018 and tracks the dynamics of indicators of corresponding programmes. Topics that were externally evaluated in 2018 are discussed in more detail. For example, questions concerning teachers (shortage, the future of the profession), are covered more deeply. In addition, the topics discussed in detail deal with the transition between different institutionalised learning paths of students, demographic changes of university students, the internationalisation of universities, international students' role, and the Estonian language's role in tertiary education.

As one of the indicators of the Estonian Lifelong Learning Strategy 2020 (MoER et al., 2014) is the increase of general wellbeing, students, teachers and parents from different levels of education regularly fill out the wellbeing questionnaires (in early years, general and secondary, vocational and higher education), and the results of the surveys are reflected in the report.

The overviews also highlight important changes and describe the issues of availability of data; they usually point out problems with data. For example, registries of students are not complete, as living abroad is not reflected in the statistics. Statistics from different years are compared and the phenomena behind them are analysed. Different factors, such as gender differences and demographics, are considered. Estimations are provided on the achievability of set targets.

Detailed reporting of educational indicators for all interest groups is provided with the help of the government web portal of education statistics Haridussilm, available on www.haridussilm.ee. Usually, indicators are calculated with the help of international methodology (Eurostat, OECD). In some cases, adapted indicators are used to reflect significant aspects of change in Estonian circumstances.

In the year 2018, a midterm evaluation of the Estonian Lifelong Learning Strategy 2020 (MoER et al., 2014) programme was carried out. The evaluation results were not included in the current report. The midterm evaluation provides evidence-based input to the planning of the next educational strategy, which has already started, and which will cover the years 2021 to 2035. It will most likely focus on personalised learning paths and seamless education, and the correspondence of learning opportunities to the development needs of society and the labour market.

The changes in value of strategy and programme indicators from 2012 to 2021 (real numbers and/or prognoses, in addition to strategy level indicators and programme-specific indicators, are monitored) are provided for each year in a table format. Data from international comparison studies, like PISA, is not provided for all years. For example, the current report did not include data from 2018 PISA, as the results were not available at the time of its drafting. Prognoses and actual data are provided in the following way: years 2009 to 2018 – actual data – years 2017 to 2023 – prognoses. For the year 2018, it was possible for the first time to compare prognoses and actual data. These comparisons of indicators are set for the whole Lifelong Learning Strategy (MoER et al., 2014) and for all five subsections of the report. The report includes the main conclusions and lists the most important activities (and measures) for the year 2018. At the end of the report, a general overview of the MoER expenditures is presented, where education, with its nine programmes, is only one part of the total 13-programme area.

The number of implementation programmes of the Estonian Lifelong Learning Strategy 2020 (MoER et al., 2014) has decreased. In 2019, there were 12 programmes, and in 2020, 11. Therefore, the structure of next year's report, and those in future, will be different to this extent. The importance of different programmes can be compared on the basis of funding allocated to the programme. The programme Competent and Motivated Teachers and School Heads received 35%, the Higher Education Programme 19%, and the Science, Development and Innovation Programme 16% of all allocated resources, with all other programmes together receiving only about 30% of expenditures of the whole administrative area of the MoER.

Financial assets in education are distributed not only directly by the central government, but also via local governments (36% of total) and are not always reflected in the current report. Some unaccounted-for assets also come from private donors and from regional cooperation.

**Target groups**

The target group of the report is the general public, theoretically anybody interested in education. The real circle of people interested in this long document is undoubtedly narrower. Whom does it consist of?

It certainly involves the Parliamentary Committee of Education and Culture, as it shows the annual account of effectiveness of the programmes. The document may provide a rich source for opposition questioning of the minister in parliament. The media in Estonia is interested in covering topics concerning education; therefore, it may be assumed that they will use it as a background source for facts and conclusions. Think-tanks dedicated to education are certainly also interested. For schools and the general public, the shorter versions of both documents may in fact prove more useful.

When external evaluators have completed their reports of the analysis of specific programmes and have made them accessible to the general public and the media, the findings are usually well-documented in the daily news.

In addition to the printed reports, previously covered, a widely used e-source of information is Education Eye, the government portal of education statistics. The programme summaries are useful as they provide a general overview of accomplished goals and development of indicators. The main conclusions are explained in the summary of the report.

It can be assumed that the universities' faculties of education prefer more detailed information. Parents and school governing boards, meanwhile, are interested in comparable information at the school level.

Readers interested in a specific programme can find the information on the ministry's home page. The various reports are available there (MoER, 2019e) as an ecosystem of rapports, including annually published reports on external evaluation, such as Annual Overview of External Assessment of Education 2018/2019 (MoER, 2019f), compiled by the External Evaluation Department of the Ministry.

The Analysis Department of the Ministry is responsible for monitoring the functioning of the education system. It collects statistics, estimates the influence of different intervention measures, writes reports for policy proposals, and cooperates with the OECD and other international organisations. The output of national education statistics can also be found in the OECD report Education at a Glance and the Education and Training 2020 (ET2020) framework. The English-language output of the Ministry Statistics Department is available on its website (MoER, 2019e).

International comparison studies like PISA, TALIS, PIAAC and corresponding secondary analyses are certainly more attractive to the general public. The extended 192 pages report is essential for accountability purposes.

**Editors, authors and coordination of publication**

The authors and editors of all aforementioned documents come from the Analysis Department and other departments of the MoER. External formative evaluations (for example mid-term evaluations) of the programmes are planned at the management level of the ministry; however, the Analysis Department usually gets its say on the process. External evaluations are often done by research institutions who have won the procurement process. Once European Social Fund (ESF) funds are used, the principles of reporting, as prescribed by the EU, are used.

## Goals and functions of the report

*Legal basis, political mandate and function*

The annual accountability principles of ministries are included in the general state laws on the functioning of all ministries and are reflected in the education legislation. If we follow the whole ecosystem, consisting also of more specific reports, single document outputs depend on intended target groups. This is the regulation area of inner documents of functioning of the Analysis Department, and corresponding process descriptions.

The function of the report is to give an annual overview of the implementation of all programmes applied in the education system, consolidated and backed up with data, with respect to the goals and indicators of the Estonian Lifelong Learning Strategy 2020 (MoER et al., 2014). The report provides accountability to parliament and to taxpayers in general. It may also serve as an input to European institutions, if European Structural Fund assets are involved. The second report also presents the targets for the next school year and lists the main activities for achieving them.

*Evaluation criteria and structure of the report*

Evaluation criteria derive from the process of drafting the overall education strategy and the development of specific programmes by their respective stakeholders. Elaboration of corresponding evaluation criteria is part of the implementation of programmes and is carried out at the ministerial level. Finalising the list of evaluation criteria is a rather long-term process involving many stakeholders. It involves civic society organisations, political parties, representatives of interest groups in education, and university representatives. Parliament has the final say.

Once civic society organisations became involved in the elaboration of the Estonian Lifelong Learning Strategy 2020 (MoER et al., 2014), all interest groups could theoretically participate in defining the evaluation criteria and topics through numerous meetings of the Estonian Cooperation Assembly and the Education Forum. The process of defining the evaluation criteria is finalised at the ministerial level. It depends on the programmes that are open in the administration area of education. If a completely new strategy is drafted, one would expect a lot of corresponding changes in the report. New programmes will be included, while old ones will be excluded. There may be a

partial overlap with the old strategy. Programmes are always contemporary and focus on the most important issues.

**Production of the report**

*Sources used and lack of data*

The main source for finding information are interoperable state electronic databases and registries; all build on common x-Road infrastructure, which enables data exchange between different electronic databases. It also involves specific data portals for data input, output and rendering. International and national surveys in education are included, and specific studies may be invoked and carried out in schools. External formative interim and end evaluations of programmes are sometimes used. To obtain specific information, questions may be added to the many kinds of tests, as well as the wellbeing surveys which are regularly carried out in schools. Reporting may also include data from other ministries if, for example, relations between education and the labour market are scrutinised. Different international organisations' comparisons and surveys are included by research corporations and the Analysis Department of the ministry. It includes ad-hoc and periodical surveys, accomplished by the MoER, the Education and Youth Authority, research organisations, and universities.

Lack of data, or concerns regarding its quality, are usually well-explained in annual reports, where specific indicators are discussed. But some hard truths must be faced: government registers are never complete or precise; people move constantly between different levels and types of education and change their status in education; they move abroad, change their name or sex, fall ill, die etc. If some international (Eurostat) statistics are not sufficiently specific for Estonian conditions, corresponding national indicators will be elaborated and applied in additionally.

Sometimes, external research projects (evaluations) are commissioned, to analyse and report upon the implementation of programmes; these results are also consolidated in the annual review.

## Dissemination

*Dissemination of the report and subsequent measures*

The report is disseminated online and is available on the ministry's website. The whole ecosystem of reports and existing data is available online. The report is also distributed in small numbers in print; these numbers are diminishing. Only some specific reports are available as a hard copy, depending on the target group.

The report is not politically evaluated. There is a tradition of writing such reports, and stakeholders are generally content with the result. The Analysis Department of the Ministry has expressed its interest in results of the CIDREE project to obtain useful feedback and learn from other countries' experiences.

The report is an annual summary of all administrative areas of the MoER. Government databases, portals and registries are constantly updated. All reports depend on each other and are part of a larger ecosystem of government educational reporting.

The document influences educational policy in several ways. The proposal for the new budget and policy recommendations are elaborated on the basis of the first longer document. A consolidated annual overview of all programmes enables evidence-based policy planning. The usefulness of the report on the school level remains an open question, as per the findings of the latest research data in this field from the United States (Gleason et al., 2019).

## Future developments

The Analysis Department has streamlined the elaboration of these kinds of annual overviews and other reviews in their ecosystem of reports. Major changes will arise due to the new strategy document. Elaboration of the new strategy has already started. New programmes will be initiated. ESF assets have been cut considerably, since Estonia already qualifies as a donor country in the EU, changing the profile of programmes considerably.

Last year a project titled 'Reviewing Monitoring and Evaluation Practices in Estonia' was launched, based on an agreement between Estonia, the OECD and the European Commission. The project summarises current monitoring processes, data and indicator frameworks in Estonia in a comparative

perspective. The aim of the project is to provide background information and analysis on the current situation in Estonia from a comparative perspective for the development of the monitoring systems and data to be aligned to the new Education Strategy 2035.

Government data systems are evolving, and artificial intelligence (AI) will be implemented in the long run. This has the potential to change the style of reporting considerably. For example, instead of a printed report, there may be a chatbot answering all taxpayers' questions in detail and adjusting appropriate elements of education. AI may also write better code lines, suggest indicators for this information system to gather, and analyse and report data. There have already been some such examples appearing in Bolton College in the UK dating back several years (Ryan, 2019).

# Extract of the report

**Reporting digital literacy programme issues in a lifelong learning framework**

A short excerpt from the report, covering digital literacy issues, is provided in order to illustrate the structure of the document. All other sections are similar, but longer. It is the newest building-block added to the Estonian Lifelong Learning Strategy 2020 (MoER et al., 2014) and covers the achievement of indicators and implemented activities in terms of the digital area. Tables are similar for all programs. So it covers also years 2013–2015, but corresponding data is missing and it is clearly expressed.

*Digital focus in lifelong learning*

The new generation of digital technology (personal digital devices, digital school infrastructure, interoperable information systems, web services, cloud solutions, open source data) and methodologies for its use provide an opportunity for rapid implementation of the new paradigm of learning and for improving learning quality. The use of digital learning resources in teaching is making learning more engaging and broadens lifelong learning opportunities. Better command of technology, and innovation among the general public, will contribute to the growth of productivity in the economy. The Estonian Lifelong Learning Strategy 2020 highlights the fact that almost one-third of the Estonian working-age population lacks the minimum digital skills, and that their information and communication technology (ICT) skills as required for work are inadequate; in addition, learners' access to digital infrastructure and digital learning resources is incomplete and uneven indeed.

The aim is to apply modern digital technology in a more efficient and effective way in education and training, to improve the digital literacy of the entire population, and to ensure access to next-generation digital infrastructure.

In order to keep up with digitalisation, the Digital Focus Programme has been implemented. As a result of its implementation, the targets set by the strategy for measuring the performance of the digital revolution will be achieved.

The digital literacy level of basic school graduates was measured in 2016 and 2017 on the basis of the wellbeing survey data. In 2018 it could be assessed on the basis of an experimental national digital literacy survey/test (Table 1). Both sources have confirmed good basic ICT skills for basic school leavers (84% of 9th grade students had at least intermediate levels of ICT skills). Approximately 30% of general education students participate in advanced ICT skills training (e.g. programming, robotics, 3D-design, cybersecurity, etc.). The vast majority of general education teachers use digital solutions in their lessons (according to the 2018 wellbeing survey, only 5% of respondents did not). Students' access to computers and smart devices has improved in schools, as compared to the previous school year, with a trend towards less computer use and more smart devices in classes. It has also been supported by the implementation of the nationally preferred BYOD approach (bring your own device), and the integration of digital literacy skills into different subject lessons. As computers and internet access are available to almost everyone at home, internet use has become an integral part of the daily lives of Estonian children: 97% of 9 to 17-year-old students use the internet on at least one device every day, compared to 82% in 2010 (Sukk & Soo, 2018).

**Key actions and activities for the year 2018**

In 2017, a digital literacy test was proposed, which enabled the measuring of the digital skills level of basic and upper-secondary school graduates for the first time in 2018. They turned out to be rather good.

Large amounts of digital learning material have been developed. The educational web environment called ‘e-Schoolbag’ contains about 10,000 digital learning devices: digital learning materials for upper secondary national curriculum courses in the fields of science, art, social studies and mathematics. The availability of digital learning materials was also improved: in 2018, a support measure for accessibility of digital textbooks for basic schools was launched, whereby approximately 350 basic schools now use digital textbooks. Alongside these developments, digital assessment tools, training materials, diagnostic tests, etc. are being developed and implemented on a large scale.

*Table 1: Achievement in the digital area (indicators and implemented activities)*

| Indicator | 2016 | 2017 | 2018 | | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|---|
| | | | Target | Actual | Target | | |
| Students who use computers or other personal digital equipment in learning*, in percent<br>U – upper secondary<br>L – primary and lower secondary | 48 (U) | 43 (U) | – | 46 (U) | | 100 | 100 |
| | 36 (L) | 34 (L) | | 35 (L) | | | |
| Basic school leavers who have proven to have basic skills in ICT**, in percent | 80 | 82 | 69 | 84 | 100 | 100 | 100 |

* The 2016 and 2017 figures are based on wellbeing survey results and are not comparable to the baseline and 2018 figures. The baseline of the indicator was determined from the results of the international study ICT in Education, using Estonian results, according to which the proportion of students who used computers in their learning was on average 33%. Thanks to the new results of ICT in Education, released in March 2019, the results of the study can again be used as an indicator for 2018. The share of students enrolled in secondary education in 2018 includes both general secondary and vocational secondary education (VET). The number of VET graduates who participated in the survey was in fact very small.

** Figures for 2016 and 2017 are calculated from the wellbeing survey results, by measuring the proportion of 8th grade students who rated their ICT skills as above average. The result for 2018 comes from the result of the experimental national digital literacy survey, where 84% of 9th-grade students have intermediate or above average skills.

As of 2018, digital tools for assessment of soft skills like self-management, communication and learning to learn have been prepared, and mathematical literacy and functional reading assessment tools have been provided for teachers. In 2018, a major leap forward in technical standards was accomplished in about 160 schools to modernise their projectors, computers, network infrastructure, and more. A unifying web portal www.edu.ee, which provides all information and services in the field of education on one site, was opened for users, and will be further developed in the coming years.

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# *The German Report on Education – fundament and developments*

## GERMANY AT A GLANCE

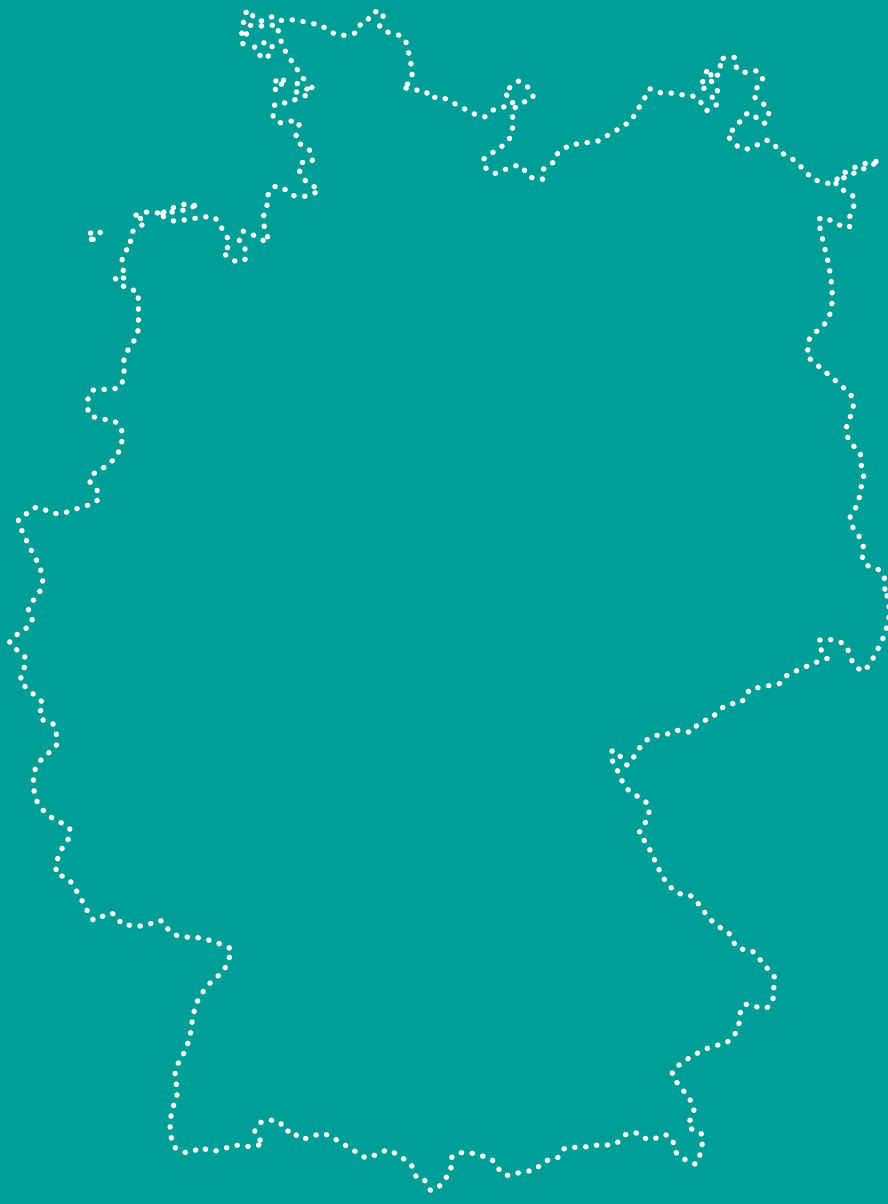
- Population: 82.9 million
- GDP per capita: 55,737 USD
- Public expenditure on education: 4% of GDP
- Educational attainment (25–64 olds)

  Upper secondary/post-secondary (non-tertiary): 57%

  Tertiary: 29%

The figures refer to the following: population 2018, GDP 2019 current prices and current PPPs, public expenditure 2016, education attainment 2018 (tertiary includes short-cycle, BA, MA, PhD) Education at a glance, OECD (2019).

Germany



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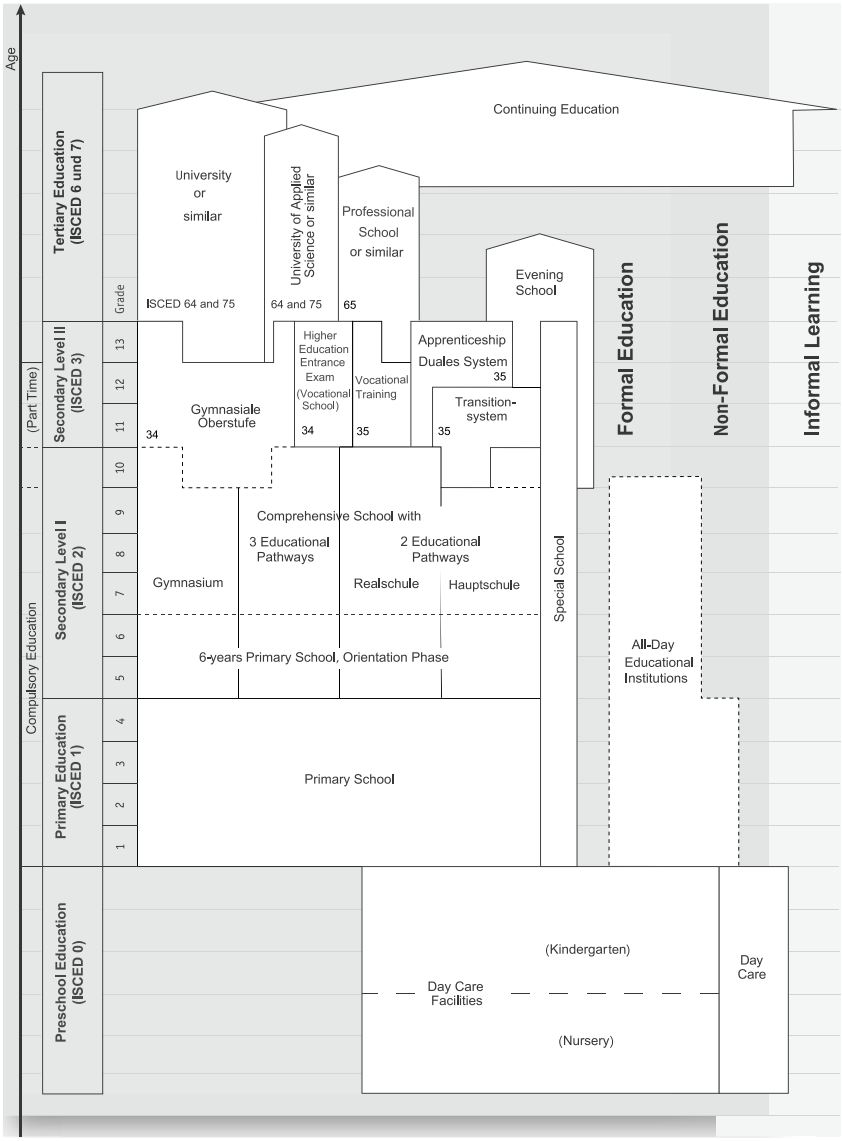
Jessica Ordemann worked as a senior researcher at the DIPF | Leibniz Institute for Research and Information in Education and coordinated the German Report on Education over the last three years. Her research interests focus on the impact of education on the returns in the labor market and beyond.

# Abstract

This contribution gives an overview of the German Report on Education. Published every two years, the indicator-based report takes a holistic approach to the German education system, from preschool to primary and secondary school to adult education. After briefly introducing Germany's demography, its economic situation, and its investments in education, the article outlines the scope of the report and details its target audiences. Following this, the contribution describes the legislative framework of the report, highlighting its legal foundation in Germany's Basic Law and its part in the strategy of educational monitoring in Germany. Then, it addresses the report's conceptual foundations, with its underlying characteristics, understanding of education, and indicator concept. Finally, the contribution presents findings from the German Report on Education 2020 about students' heterogeneous competence range when entering the different lower secondary education tracks.

# Education system



# Description of the report

## Introduction

Education is an important resource in today's knowledge-based society. This is especially true for Germany, where natural resources are limited. Currently, approximately 83 million people live in Germany, more than ever before. Population declines due to discrepancies between the birth and death rates have been counteracted by migration over the last couple of years. A quarter of the population has a migration background of which one third was born in Germany.

Until the COVID-19 pandemic, German GDP was trending upwards, although it varied greatly within the country. In 2017, 6.4% of GDP was invested in education. An overview of the structural facts of the German education system shows that the number of child care and higher education institutions has grown, whereas the number of schools and vocational schools has declined in the long run due to falling student numbers. Nevertheless, independently run private schools have gained in significance, especially in Eastern Germany. The number of education-sector employees performing pedagogic and scientific tasks has increased throughout the whole system, mainly due to growing numbers of women and part-time workers.

The German Report on Education has documented these developments in education since 2006 by taking a holistic perspective to education over the life course. This means that its results can be compared over time but also by regions, fields and levels of education, types of institutions, and socio-demographic groups – assuming the existence of indicator-based information, i.e. continuously available and nationally representative data. The following contribution first gives an overview of the institutional details of the German Report on Education before highlighting the latest report's findings.

## Institutional details

The German Report on Education covers all aspects of the education system, from preschool to further education and training, dealing with the general conditions, features, results, and returns of education within each sector and between them. This broad approach is of special interest for the German federal government and for the states (*Länder*), because it can account for comprehensive trends and relations between the sectors of education. The main focus lies on the nationwide system (on the federal level and on comparisons between the *Länder*) and its parts, and the report combines institutional and

individual information on education. Each report also includes an alternating comprehensive review on one specific topic, such as the returns on education (2018) or digitisation (2020), which are decided upon jointly by the steering committee, the scientific advisory board, and the Authoring Group.

The German Report on Education periodically presents a major scientific and empirical review of the German education system. It is a standalone publication that is published every two years to stimulate public and political debates and to put these on a firm empirical footing with long-term indicator-based trend information. Whereas shorter or longer publication cycles were discussed during the conceptual meetings in the early 2000s and have been continuously reconsidered since then, the two-year publication cycle has proven valuable for Germany in identifying long-term trends and reacting to recent societal changes such as the wave of refugees (2016) or COVID-19 (2020).

The report is primarily written for policy makers in the educational policy and administration fields at national, state, and municipal level as well as for the specialised sections of the ministries for education and cultural affairs, the national ministries, and the political-administrative state institutes. Furthermore, the data is used by researchers, professors, and students for their own research, teaching, and studies as well as by educational professionals (e.g. school administrators and heads of libraries), organisations, unions, foundations, and the interested public. Finally, journalists and editors of regional and national publications can use the report to analyse the German educational system.

The findings are published in three different ways. The report itself is a book of around 300 pages. In addition, its core information is condensed and crisply edited in an easily accessible additional booklet for the broader public. Both publications include infographics to give the interested public better access to the report's information. Last but not least, all the analysed data, dating back to the very first report, are provided in electronic form by a website dedicated to the German Report on Education (available on www.bildungsbericht.de).

**Legislative framework**

The legal basis for the German Report on Education is Germany's constitution, or Basic Law (*Grundgesetz*). More specifically, this means that Germany is organised in a federal structure, where its *Länder* hold the main

responsibility for education. Hence, Germany's Basic Law regulates the distribution of responsibilities regarding educational programs between the federal government and the *Länder* in article 91b. It states: 'The Federation and the *Länder* may mutually agree to cooperate for the assessment of the performance of educational systems in international comparison and in drafting relevant reports and recommendations' (*Grundgesetz*). Based on this, the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* has developed a comprehensive strategy for educational monitoring. The strategy encompasses four areas of educational monitoring: (1) participation in internationally comparative student assessment studies (e.g. PIRLS/IGLU, TIMMS, PISA), (2) a central review of the achievement of educational standards, (3) comparative studies on educational quality assurance within the *Länder* (e.g. VERA), and finally (4) a joint education reporting system of the federal government and the *Länder*, the German Report on Education. Funding for the report on education is provided by the Federal Ministry of Education and Research and the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany. Both parties are advised by a scientific advisory board, especially regarding the content of the report and its scientific value.

**Production of the reports**

Leading educational researchers from several high-ranking German institutions with specific expertise in research and statistics make up the Authoring Group of educational reporting. The so called Authoring Group defines and develops the conceptual basis for the evolving report. In each cycle, it highlights different research questions that are of importance in the individual educational areas. Regular meetings of the Authoring Group ensure a continuous dialogue about the German education system and serve to orient the findings. Each member of the Authoring Group is supported by a group of researchers within their respective institution; these researchers are responsible for the collection, processing, and analysis of the data that each report is based upon. The DIPF | Leibniz Institute for Research and Information in Education is responsible for coordinating the report.

Conceptually, the German Report on Education has three basic characteristics:

The report is based on an educational concept whose goals are represented in three dimensions: individual self-direction, social participation and equal opportunities, and human resources.

The report's conceptual approach centres on lifelong learning. It considers all sectors and levels of education and provides information about the scope and quality of the programs offered by various institutions and about participation in such programs.

The report uses data from official statistics and representative social science surveys that, where possible, cover developments in recent years and decades and make comparisons at national and international level.

These characteristics are reflected in sets of indicators that reflect an understanding of education consistent with a context-input-process-output-outcome model (Maaz & Kühne, 2017). The report's indicators are understood as quantitative measures that can both reveal and simplify complex relationships in education. These key figures are distinct in their content and can be represented by specific statistical parameters such as numbers, ratios, indices, means, or coefficients. Key figures are linked to basic data with background variables such as gender and reference data, for instance population. To ensure that central features of educational processes or central aspects of educational quality are represented as comprehensively as possible, each indicator itself is based on a combination of different statistical parameters. These are often derived and merged from very different data sources such as statistical data, PISA data, or the data of the National Educational Panel Study (NEPS), with a view to comparing developments over the past years and decades or breaking them down by the *Länder* or internationally.

However, this aim to use high-quality data with substantial explanatory power implies that the educational report has certain limitations. More specifically, it can only take into account current problems in the development of education to the extent that reliable data have been ascertained. The core set of indicators remains the same in each report; hence, it guarantees a comparison of developments with differing emphases. This educational reporting owes its specific informative power to this consistency. Moreover, each volume includes further indicators for additional subject areas. The availability of representative and longitudinal data is a continuous challenge for the German

Report on Education, as it can only make statements on the current situation of the German education system, on existing problems and educational developments, and on lifelong learning processes if such data is available.

All in all, the main function of the report is to give a descriptive, analytical, and evaluative overview of the requirements for education, educational pathways, results and societal impacts and thereby identify central trends and problems from a macro perspective. If there is a gap in the data needed for effective educational monitoring, the report highlights those deficits. However, the report does not include any assessments and recommendations for policy and politics, as it seeks to offer a data-based, problem-centered analysis.

**Dissemination**

One of the most essential aspects of monitoring processes is the transfer of findings to politics, educational administrations, science, and the interested public. Therefore, after completion, each report is first presented to the governance board and then to the media. Subsequently, the report is presented to the scientific and broader public. When requested, the findings are presented to individual German *Länder*, for example, in their parliaments. In addition, the Authoring Group and its team also presents their research findings during national and international scientific conferences or transfers them in summarised form into political or societal discussion and decision-making procedures whenever possible.

*Figure 1: Education reports since 2006*

**Development**

The German Report on Education is continuously evolving so that it can better achieve its goals of monitoring key aspects of the education system and providing evidence-based information to its target groups. One recent example of its further development has been the distinction between identifying problems and challenges. Furthermore, besides the fundamental statistical descriptive contents, the report more and more applies additional methodological approaches, such as sequence or multivariate analyses. These development processes will shape the report in the future, especially since the NEPS will gradually enable further analyses within the education system and its transitions. Another recent example is the design of an evaluative reception study. Up until recently, there was no systematic self-evaluation of the report. To learn more about the German Report on Education's target audiences and how they incorporate the knowledge thus acquired in their policy, DIPF will conduct a reception study in 2021. The latter development is part of an institutionalised development process that is currently taking place with all partners of the report. In 2022 the project itself will be evaluated by an independent external commission for the second time.

# Extract of the report

**Structure of the German Report on Education**

The report is structured as follows:

| | |
|---|---|
| Chapter A | Context of Education |
| Chapter B | Educational Institutions and Participation |
| Chapter C | Childcare |
| Chapter D | School |
| Chapter E | Vocational Education and Training |
| Chapter F | Tertiary Education |
| Chapter G | Lifelong Learning |
| Chapter H | Focus Topic (2020: Education in a Digitised World) |
| Chapter I | Returns on Education |

**Insights into the report: school indicators**

The following passage highlights the reading competencies grade 5 to 9 by school types and social background as one example for analysis presented in the German Report on Education.

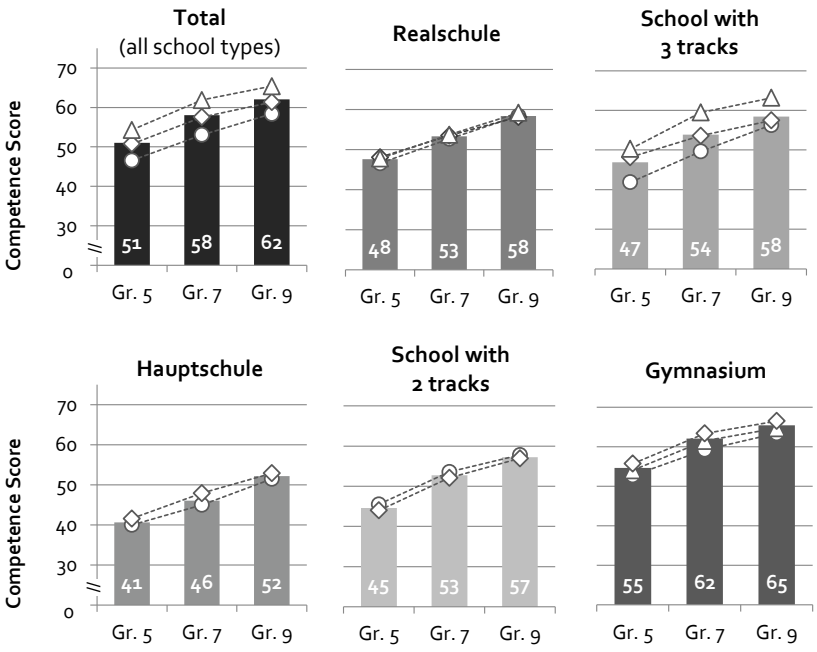
There are a variety of pathways within the German school system. Comprehensive primary school education ends in grade 4 in most of the *Länder*, after which students are sorted into different school tracks and types according to their previous achievements. Since 2006, the German Report on Education has made great efforts to systematise the differentiated and nonstandardised school types and structures across the *Länder*. Additionally, it has also sought to shed light on the individual pathways that students with different sociodemographic backgrounds take within these structures. But because the German school statistics only contain annual cross-sectional and aggregate counts of students, the report could only provide time-point specific snapshots (stock indicators) for a long time. These parameters, however, cannot reflect how many students enter, remain in, or leave one of the tracks over time (flow indicators).

Previously, the German Report on Education lacked longitudinal information that could provide a more accurate picture of what happens to students as they move through the educational pathways within or between schools. With the launch of the National Educational Panel Study (NEPS) in 2009, this situation improved considerably. These data now allow for longitudinal analyses over several years, which has enabled the 2020 German Report on Education

to describe school mobility and transitions for the first time. Because NEPS covers a broad range of topics and assessments, students can be tracked over time and compared with regard to the developmental changes in their cognitive skills and other dispositions.

Figure 2 below shows trends in reading competencies from grade 5 to 9 by school type and social background; this is one example of the analysis done for the German Report on Education 2020. The main finding concerns the students' heterogeneous competence range when entering the different tracks of lower secondary education. In line with the proficiency requirements of each school type, the initial skills differed considerably between the chosen tracks – the lowest secondary school track (*Hauptschule*) had the lowest scores and the highest secondary track (*Gymnasium*), which leads to university entrance qualifications, had the highest ones. Over time, students in every single school type experienced significant competence growth from grade 5 to grade 9. In fact, achievement was higher the lower the starting point had been. Moreover, it shows that students from disadvantaged family backgrounds were likely to improve their skills the most. Nevertheless, the competence level reached by grade 9 by students in the *Hauptschule* was still lower than the competence level that students in *Gymnasium* started with in grade 5.

*Figure 2: Development in reading competencies, grade 5 to 9 by school types and social background* (in competence scores**)*




* Highest International Socioeconomic Index of Occupational Status of the parents (HISEI); comparison of the 25% of students with the highest HISEI scores (high SES), the 50% with medium scores (medium SES) and the 25% with the lowest ones (low SES).

** Mean scores are based on WLE (weighted likelihood estimation) and transformed to a metric with mean = 50 points and standard deviation = 10 points.

*Source: LIfBi, NEPS, Starting Cohort 3, wave 1 (2010/11) to wave 5/6 (2014/15),* doi:10.5157/NEPS:SC3:8.0.1, *unweighted data*

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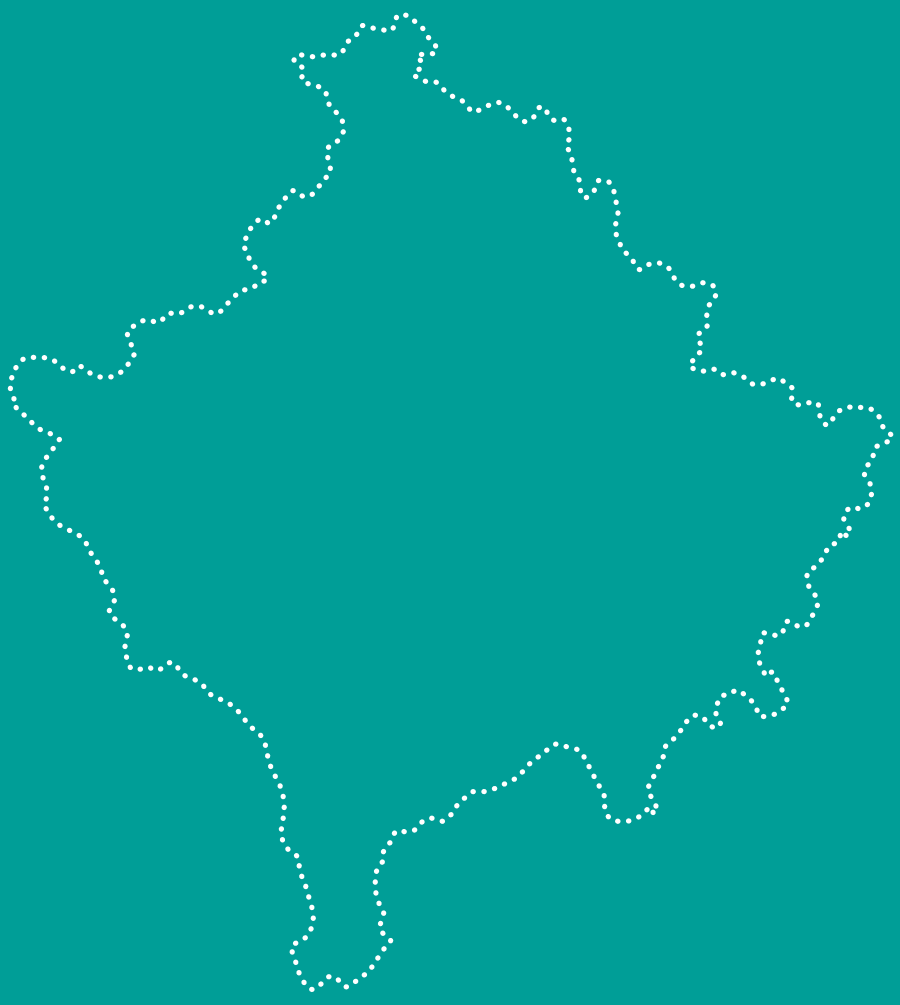
# *Report on Education in Kosovo*

## KOSOVO AT A GLANCE

- Population: 1.8 million
- GDP per capita: 10,868 USD
- Public expenditure on education: 4.1% of GDP

The figures refer to the following: population 2018, GDP 2018 current prices and current PPPs public expenditure 2019, no comparable numbers available for educational attainment (information provided by the authors).

Kosovo



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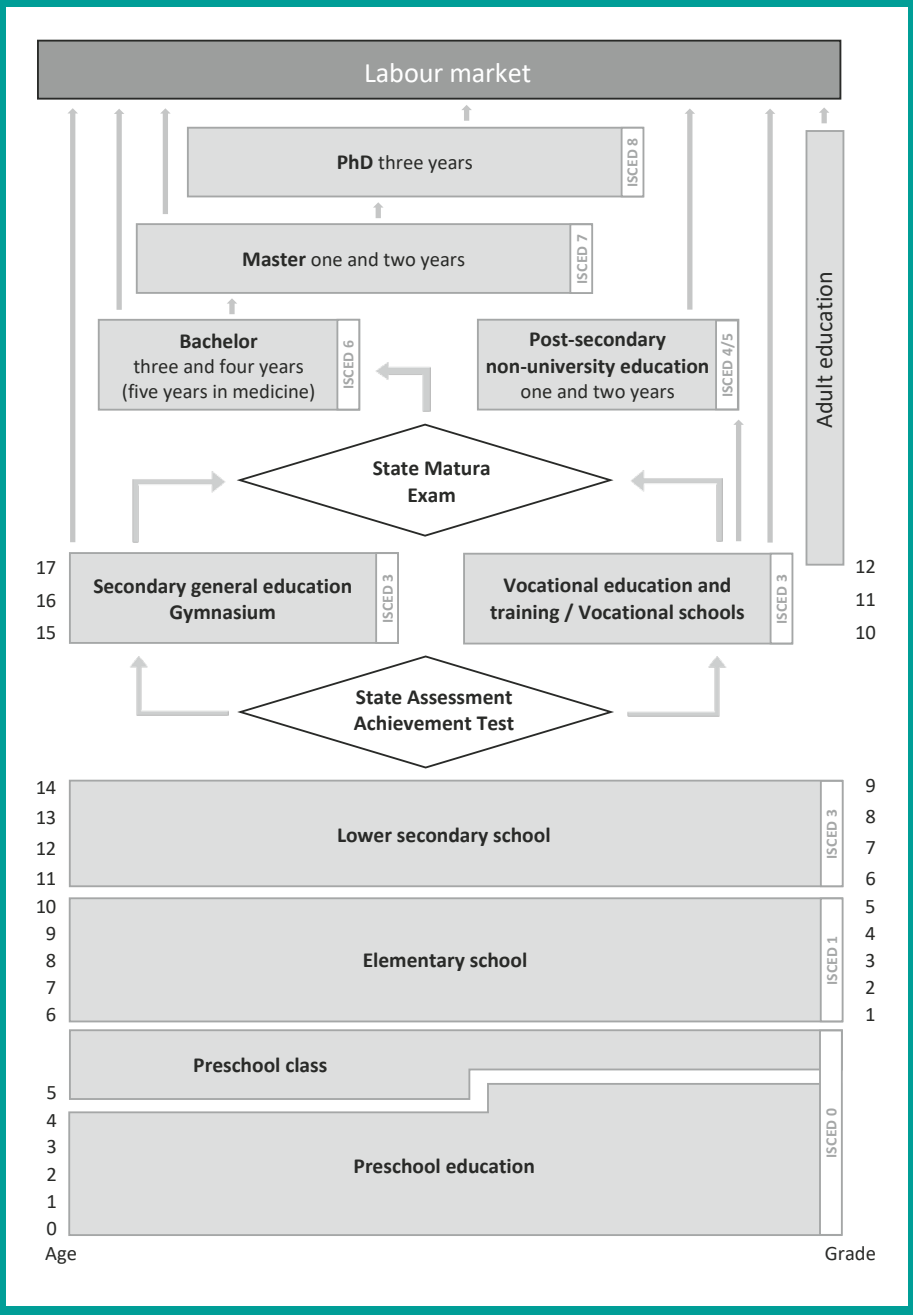
# Abstract

This contribution provides a summary of the annual evaluation report on implementation of the Strategic Plan for Education in Kosovo 2017–2021 (KESP), which is the basic document for the development of education, approved by the government of the Republic of Kosovo and implemented under the leadership of the Ministry of Education, Science and Technology (MEST). The annual report KESP evaluation is the main report that covers the main aspects of the development of education in line with strategic objectives, annual activities and performance indicators defined by KESP. The report serves as a basis to assess the progress of the KESP implementation, the annual review and is a tool for evaluating educational policies from preschool education up to university education. Difficulties in providing some data for the annual reporting on the education system in Kosovo, as well as the lack of regular and specific reports on the formal levels of the education system and on thematic areas beyond the Strategic Plan, greatly challenge the quality of the report and its function to ensure the quality of the education system. Discussions in the educational community in Kosovo for future developments on the national reports on education focused on regular and institutional reports, based on measurable indicators that allow preparation of a comprehensive annual report on education in Kosovo, and a report on implementation of the Strategic Plan.

# Education system



# Description of the report

**Introduction**

The education system in Kosovo includes a number of institutional stakeholders, including central, local and educational institutions. Ministry of Education, Science and Technology (MEST) is the main government institution in the education sector, responsible for developing standards for higher education, the curriculum framework, teaching standards and professional qualifications, among other things. It is also the institution responsible for coordination in the field of strategic planning, educational development and evaluation of the education system.

The annual statistical report for the education sector and the annual report for evaluating the implementation of the Strategic Plan for Education in Kosovo (KESP) are two national reports that are annually published in Kosovo. These reports offer data for preschool education (ISCED 0), primary and lower secondary education (ISCED 1 and 2), upper secondary education (ISCED 3), postgraduate non-university education (ISCED 4–5) and university education (ISCED 6–8). Both reports have the general public's attention of educational institutions, civil society and the media, serve as a basis for the development of educational policies, fulfill the mandate to provide the necessary data and assess participation in education, quality of services in education system, as well as achievements of pupils and students in Kosovo.

This contribution provides a specific description of annual reports for the evaluation of the KESP 2017–2021, its purpose and function of the periodic reporting, evaluation of the strategic plan implementation, based on the details of annual report published in March 2019, including its structure, content and report delivery.

**Strategic Planning for Education in Kosovo (KESP)**

In Kosovo, the practice of developing a unique education strategy has continued through the process of developing the KESP 2017–2021, a plan that is being implemented and which is the basic document to guide development of the education sector in Kosovo until 2021. The basis of new strategic planning were KESP 2011–2016 evaluation report conducted in 2015 and state analysis done by the Core Planning Group formed by MEST. Unlike the previous plan, KESP 2017–2021 is organised in seven areas, five of them are thematic areas and cover all relevant segments of pre-university education in Kosovo, and two sub-areas are referred to their specifications for vocational education and training, adult education and higher education including (MEST, 2016a):

1. Participation and inclusion
2. Management of the education system
3. Quality assurance
4. Teachers' development
5. Teaching and learning
6. Vocational education and training, and adult education
7. Higher education

Since the beginning of the implementation of the KESP 2017–2021, four evaluation reports have been produced for the implementation of the annual activities plan and strategic objectives, two of them are national evaluation reports compiled by MEST with support from the project on Capacity Building in Basic Education (GIZ CBDE), and two other evaluation reports which have been developed by civil society (Kosovo Network for Education and Employment – KEEN) based on monitoring the implementation of this document (Pupovci et al., 2017; Mehmeti et al., 2019). The third evaluation report by MEST at the time of writing this article is in the preparation phase. The focus of this article will be the national KESP evaluation report published in March 2019.

**Institutional details of the annual report on the evaluation of the implementation KESP**

The annual report on the implementation of the KESP is coordinated by the Department for European Integration and Policy Coordination within the MEST and is implemented with the support of GIZ CBDE. The practice has been established so that to draft the annual evaluation report, the MEST sets a working group which includes: the coordinator of the working group; management and leadership member; research and analysis expert; core group members, organisational support staff; and contributors representing areas of intervention covering Strategic Plan. The size of this working group ranges from 4 to 12 people in a field of intervention in the education sector (MEST, 2019). The work of this group and the expected research and analysis is guided by certain evaluation criteria and the structure of the upcoming report.

The annual evaluation report is based on the annual action plan and statistical data published by the Education Information Management System (SMIA). The report is periodic, published annually and as such is expected to be realised in 2020 and 2021.

The scope of the annual evaluation report includes all levels of education in Kosovo, ranging from preschool education to higher education. The target group of the report are institutions that guide and support the implementation of KESP activities. Also, the report is based on the evaluation of the implementation of activities and the impact of activities on achieving strategic results and objectives (Aliu, 2019), in relation to the indicators for measuring the achievement of the objective in the existing situation of annual plan of 2016 and goals set to be achieved by the end of 2021.

**The purpose and function of the report**

The annual report on the KESP implementation evaluation aims to serve as an (i) instrument of accountability through the provision of data on achievement of results, implementation in practice and institutional capacities functioning; and (ii) to serve as a basic document for drafting the next Strategic Plan.

The annual evaluation report focuses on providing answers to several questions, such as: (i) what has been the performance of MEST and other actors compared to the goals and objectives set out in the Initial Plan; (ii) how relevant the goals and objectives set for the current context are; and, (iii) how well the KESP has been used as a platform for advancing national objectives in the field of education (MEST, 2018 and MEST, 2019).

According to the annual report of KESP evaluation, performance index of sub-sector derives from calculating the degree of implementation of activities and results. In the annual report of KESP evaluation, the rate of implementation of activities and outcomes by strategic objectives is estimated by one of five levels of evaluation: 1 – no progress (0–19%); 2 – little progress, (20–39%); 3 – in progress (40–59%); 4 – significant progress (60–79%); and, 5 – completely fulfilled (80–100%).

Standard criteria are used for each rating scale, e.g. level 1 means no progress at all. The following criteria were taken into account:

There were no primary laws, guidelines, rules, strategies and policies.

There was lack of law and policy implementation.

There were no financial resources allocated for management and human resources, and no financial resources provided for implementation of laws, regulations, guidelines, strategies and policies.

Level 5 means, in contrast, completely fulfilled. The criteria taken into account is as follows:

All laws and guidelines have been approved.

It was consistent implementation of legislation in the last five years.

Implementation is the norm and barriers can be very rare or isolated.

Institutional capacities were fully functional and funding was adequate for the implementation of legislation and practices.

The function of the annual KESP evaluation report was the annual review of the achievement of strategic objectives, which ensured the quality of services in the education system, the promotion of institutional debate for capacity building, human and financial resource management, budget allocation for areas of the intervention that have been evaluated with lower quality, prioritisation of support areas by international partners, etc.

**Drafting of the report**

The substantive structure of the KESP Annual Evaluation Report 2017–2021 includes: (i) the scope and methodology of the evaluation; (ii) the context of the education sector (in relation to the political, economic, social and technological context); (iii) information for education system and performance indicators in education; (iv) summary of annual progress; (v) analysis of activities according to the areas and objectives of the Strategic Plan; and (vi) conclusions and recommendations.

The annual evaluation report is drawn up on the basis of reviewing related documents and KESP reports, based on analysis of static data and dynamic data collected by quantitative methods, data collected by qualitative methods, from case studies (Kosovo, region, EU), focus groups, workshops, thematic roundtables and semi-structured interviews with MEST officials, municipal education officials, agencies related to MEST, representatives of university institutions, school representatives, teachers, civil society organisations, scientific researchers and development partners (MEST, 2019).

The report provides descriptive data for implementing activities and achieving results under strategic objectives, tables, graphics presentations, comparative analysis with descriptive statistics on the performance index by strategic objectives in relation to indicators to measure achievement of objectives and formal levels of education in Kosovo. The report presents national comparisons of population trends, expenditure on education, as well as comparisons with OECD averages in some areas, such as comparing governance parameters and quality of schools in Kosovo with other countries, the annual workload of students in classes (OECD, 2018), institutional ranking of Universities in the Western Balkans Scimago (SIR) 2018, Human Capital Index (HCI) 2018 – Comparison (World Bank, 2018).

Also, from the analysis and review of the annual report of the KESP evaluation, it has not been possible to identify any specific study project commissioned for the annual evaluation reports of the KESP implementation 2017–2021. However, in the annual evaluation reports, the independent expert engaged by GIZ project, starting from the principle that education systems are measured on the basis of their performance in relation to important international indicators from the EU monitor (Eurostat), the United Nations (UNESCO) and OECD, has made special comparative analysis of the Kosovo system with countries in the region and the EU. The analysis presented in the reports go beyond KESP planning, but give answers and guidance for one of the main questions of the scope of the report: How relevant are targets and goals set for the development of education in the current context?

**Distribution of the report**

For all annual evaluation KESP reports, MEST follows a practice of organising a one-day conference for publication, discussion of the results/findings and distribution of the annual evaluation report. All institutional stakeholders are invited to this event, including the central, local and educational

institutions/schools, as well as international and national partners who support the development of education. This practice is followed by the fact that the Strategic Education Plan in Kosovo connects all segments of education, as well as the fact that its implementation depends on the institutions that have a leading role in the activities outlined in the plan. However, despite efforts to involve all key actors in this event, there is no evidence that the report is distributed to all institutional stakeholders. The evaluation report of KESP 2011–2016 (MEST, 2015) is published on the official website of the MEST, but not the annual reports of the last three years.

On the other hand, the civil society organisations that are engaged in the field of education have published two reports on the monitoring of the implementation of the KESP (2017 and 2019 reports), conducted by the Kosovo Network for Education and Employment (KEEN), under the project funded by the European Union office in Kosovo. KEEN, in addition to distributing the reports and discussing them at special conferences, has also published them online.

From the way the report is published and how its results are used, it is seen more as an isolated and technical report of MEST, which does not have a major impact on the work of local education authorities and educational institutions from kindergarten to the university level. Even the interventions made by MEST, referring to the evaluation report, have not become a practice to be transparent and published on the official website of MEST.

Future developments regarding the report largely depend on decision-makers at MEST. Such reports are expected to be developed in 2020 and 2021, when the mandate of KESP 2017–2021 ends, and when the new directions for development and new priorities for education in the next five years are set.

# Extract of the report

**Summary of the KESP's annual evaluation report 2018**

The following section focuses on providing a brief summary of the annual evaluation report for 2018, published in March 2019, mainly the fourth chapter of the report: summary of annual progress, which reflects an overview of the achievements in the implementation of the KESP, the degree of implementation of planned activities under strategic objectives and comparison of parameters with some OECD countries.

According to the annual report of KESP evaluation for 2018, the rate of implementation of activities is standardised according to the calculation formula for certain activities measured with financial figures. Some are measured in numbers and some others in percentage (%). While aggregation – summarising progress through objectives – is done by weighing, the changes in the number of activities is done through the weighted average. This report integrates both the framework and indicators, and also the implementation matrix scaled according to activities (levels 1 to 5).

According to the evaluation report, about 68% of the total number of planned activities in KESP on 2018 were completed this year. Compared with 2017, there has been an increase in the implementation of activities in all strategic objectives, about 13%. However, for each strategic goal a number of activities have remained uncompleted, mostly in the objective related to higher education, where about 41% of the activities planned for 2018 have not been completed. Details in relation to the achievements by years and strategic objectives are reflected in Table 1.

According to the report the overall rate of the KESP implementation according to the strategic objectives for the years 2017 and 2018 is calculated as a percentage based on the escalating evaluation activities, results and impact sub-sector.

Results in Table 1 provide the answer to the question: What has been the performance of MEST and other stakeholders compared to the goals and objectives set in the initial plan?

According to results of the report, the strategic objective 'participation and inclusion' has remained a priority for MEST, municipalities and partners supporting education, and therefore has the highest level of implementation and consequently has the highest performance of MEST and other actors related to this strategic objective.

Referring to the report, an increased intensity has been documented in the implementation of activities within the strategic objective of 'management of the education system'. Also, a significant improvement has been documented in the implementation of activities of strategic objectives: quality assurance, teacher development, vocational education and teaching and learning. During 2018, although there was an improvement in the level of implementation of activities in higher education compared to 2017, relevant higher education institutions still remain at a lower level in carrying out activities in this field of intervention in education, compared to other areas of intervention in pre-university education.

*Table 1: Comparison of the degree of completion of the planned activities in 2017 and 2018*

| No | Strategic objectives | Performance index (1–5) according to strategic objectives | |
|---|---|---|---|
| | | **2017** | **2018** |
| 1 | Participation and inclusion | 70% | 76% |
| 2 | Management of the education system | 66% | 72% |
| 3 | Quality assurance | 60% | 72% |
| 4 | Teacher development | 52% | 64% |
| 5 | Teaching and learning | 50% | 64% |
| 6 | Vocational education and training and adult education | 48% | 66% |
| 7 | Higher education | 40% | 59% |
| | Total weighted average | 55% | 68% |

Part of the annual evaluation report is also the matrix of implementation of annual activities. Table 2 presents an example of a matrix for the implementation of three activities, for a result of the second strategic objective, namely the area of intervention 'management of the education system'.

*Table 2: Activity implementation matrix*

| | | |
|---|---|---|
| **Area of intervention:** Management of the education system<br>**Strategic objective OS2:** Quality and efficient management of the education system, based on transparency and accountability | | |
| **Result 2.1.** Build capacities for effective and responsible management of the system at central and municipal level, as well as effective management at school level | | |
| **Activities** | Progress in the implementation of activities planned for 2018, expressed according to the status of the implementation scale 1–5 and in percentage | |
| | **Status** | **%** |
| 2.1.2 Training Municipal Education Directorate (MED) staff according to identified needs and in accordance with decentralised structure of education system | 2 = in progress | 40–59% |
| 2.1.7 Training of administrative staff and members of the governing body of the school for governance and leadership | 4 = significant progress | 60–79% |
| 2.1.11. Strengthening school autonomy | 2 = little progress | 20–39% |

How is the status of implementation of activities determined as in progress, significant progress or little progress?

For each activity the benchmark has been the initial basis of the indicators for measuring the achievement of the objective. For example, for the activity 'training MED staff according to identified needs and in accordance with

decentralised structure of education system' (2.1.2) (MEST, 2016b), the number of staff in MED trained for educational leadership in 2016 was taken into account, and it was compared to the goals set for 2021 and the interim goal to be achieved in 2018. Then, according to the report, sub-activities in the KESP action plan that should be implemented during 2018 were analysed, such as needs analysis, development of training programs, organising of trainings, mentoring in the workplace, and interviews with education officials from MED's were conducted. Based on such analysis, the report shows for this activity has significant progress, that about 60% of the plan related to this activity has been completed.

For the activity 'strengthening school autonomy' (2.1.11), the percentage of schools in 2016 that have the budget code and manage their own budget was taken into account, and it was compared to the percentage achieved in 2018 in relation to the purpose specified that by the end the year 2021 all schools should have their budget code and manage their own budgets. The report shows that this activity has significant delays and the number of schools that have budget code and manage their budget is very small and this trend is not expected to reach the goal set for 2021.

In the same form, annual evaluation report of the KESP contains the matrix of the implementation of activities for each strategic objective, namely the results and activities of the seven strategic objectives that are part of the KESP 2017–2021.

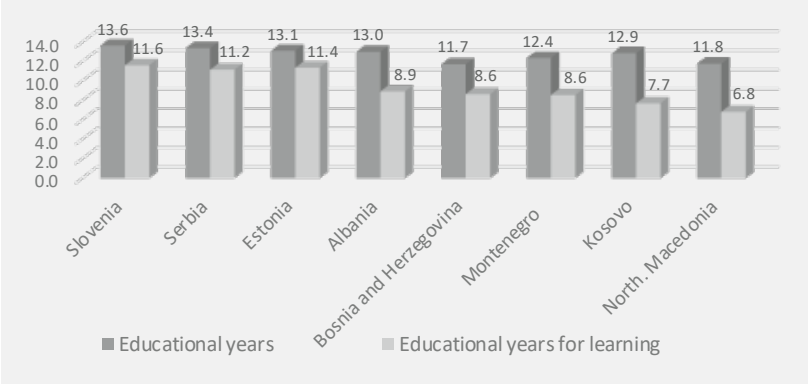
In the summary report on the annual progress of the evaluation of the KESP for 2018, a comparative analysis with the countries of the region and with the OECD is also reflected.

According to the report, the rate of children's involvement in preschool education is very low compared to other levels and very low compared to regional trends, the EU and the OECD countries. With the support of the public sector and international partners, investments in the sector have increased, and in the last two years the trend of increasing the inclusion of children in preschool and primary education has been increasing.

According to the report, students in Kosovo can expect to complete 12.8 years of pre-primary, primary and secondary education by the age of 18, a number which is very close to many EU countries. While the years of education in Kosovo are higher than in Northern Macedonia, Montenegro and Bosnia and Herzegovina, the quality of education remains low and according to the report

it does not provide a significant effect on student achievement. According to the World Bank's Human Capital Index report on Kosovo, when years of education are compared to achievement of students in standardised international tests and are adjusted for quality of learning, the 12.8 years of pre-primary, primary and secondary education are only equivalent to 7.7 years of education (Figure 1). Thus, there is a learning gap of 5.1 years of education, and students in Kosovo complete only 60% of the expected achievements for pre-primary, primary and secondary education (Human Capital Index Rank 80 out of 157; World Bank, 2018).

*Figure 1: Comparison of school years adapted for learning based on PISA 2015 results*




*Source: Annual Evaluation Report of the KESP 2017–2021 (MEST, 2019) referring to the World Bank report (World Bank, 2018)*

On the other hand, according to the 2018 report, the education system in Kosovo has achieved comparable parameters with advanced countries in terms of student teacher ratio, number of students in school, number of students per class or teacher salaries compared with national average income, but not with the level of quality and student achievement (MEST, 2019).

Referring to the annual report of evaluating KESP, the length of instruction time for students in Kosovo, compared with the OECD countries, per annum, is 40% lower in grades 1 and 2, while upper secondary school, grades 10 to 12, is 24% lower. In other grades, the differences are smaller (MEST, 2019).

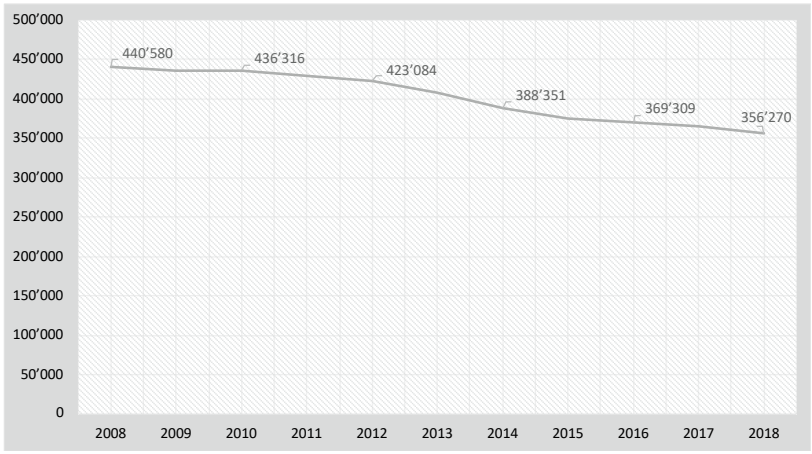
According to the findings presented in the report, an ordinary school in the education system in Kosovo has a very low level of autonomy compared to advanced countries, the responsibility of teachers, principals and councils continues to be limited to influence decision-making. Also, according to the report, the model of school management is built in such a way that reverses the school from liability for results. The comparison given in the evaluation report, regarding the parameters of governance and quality in school in Kosovo with other countries is reflected in Table 3.

*Table 3: Comparison of governance and quality parameters in school in Kosovo with other countries from the database in PISA 2015*

| **Compared parameters with numbers or percentage** | **Countries** | | | | |
|---|---|---|---|---|---|
| | Kosovo | Albania | Slovenia | Finland | OECD |
| Average achievement in science PISA 2015 | 378 | 427 | 513 | 531 | 493 |
| School autonomy – the perception of teachers and school principals | 44% | 66.1% | 76.5% | 74.7% | 71.3% |
| Average number of students in school | 341 | 271 | 500 | 437 | 762 |
| Report student per class | 20.8 | 27.4 | 25.9 | 19.1 | 26.1 |
| Report teacher per student | 15.2 | 8.3 | 10.8 | 10.3 | 13.1 |
| Computer-student ratio | 0.14 | 0.15 | 0.59 | 0.79 | 0.77 |
| Average number of students in school | 14.2% | 28.3% | 76.2% | 58.1% | 66.1% |

Referring to the report, Kosovo is characterised by a model of small schools where about 60% of schools in basic education (Kindergarten to grade 9), have less than 250 students because of the significant demographic changes. The number of students in pre-university education has been significantly reduced in the last decade (Figure 2). In the pre-university education sector (Kindergarten to grade 12) in 2018 there were over 84,000 students less than in 2008, or about 20% less students, which is caused by population demographics, declining birth rate but also migration out of Kosovo.

*Figure 2: Number of pre-university education students 2008–2018*




*Source: Annual Evaluation Report of the KESP 2017–2021 (MEST, 2019)*

The reduction of the number of students will result in reduced number of classes in schools, and then a reduced need for teachers. Ultimately, it will reduce the number of schools. Referring to the report, based on population projections (KAS, 2013), this trend is expected to continue in the coming years.

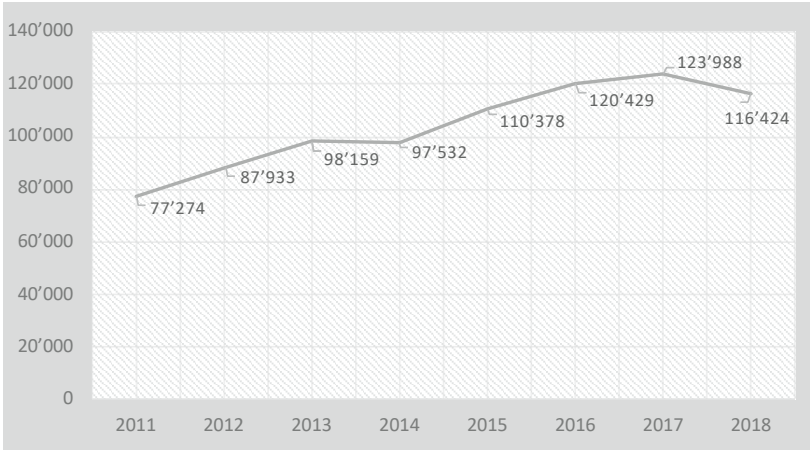
On the other hand, the movement of population from rural to urban areas continues to cause a greater burden on urban schools and reduce the number of students in remote rural areas. Therefore, the KESP evaluation report (MEST, 2019) recommended that the plan should include targets around the accommodation of this development by optimising the network of schools and optimising the number of teachers by using data from population projections, which underline a decreasing trend in the number of students at all levels of pre-university education.

Referring to the annual report, spending on education by educational levels does not reflect national priorities. The funding rate for preschool education is extremely low. Expenses in higher education as a percentage (%) of total expenditures on education are also low. The structure of expenditure on education is dominated by the category of staff salaries (about 74%) and running costs. Capital costs are very low, too.

According to the annual report, although positive steps have been taken in vocational education, there are still concerns regarding mismatch of the skills offered for the labour market. In recent years, more students have focused on vocational education than on general education, and this ranks Kosovo close to the average of developed EU countries.

In relation to higher education, university education, according to KESP's evaluation report (MEST, 2019), Kosovo has about 116,000 students. Also, referring to the report, we learn that the number of students has increased thanks to the growth of the private sector supply and the establishment of public institutions in some areas of Kosovo (Figure 3). About 73% of young people of the age group 18 to 22 continue their higher education. With this degree of involvement in higher education, Kosovo is ranked among the countries and regions with the highest gross degree of inclusion in higher education.

*Figure 3: Number of university students in Kosovo 2011–2018*




*Source: Annual Evaluation Report of the KESP 2017–2021 (MEST, 2019)*

According to the report, while the number of enrolled students has increased, the graduation rate is below 20%. On the other hand, there is a growing number of unemployed graduates. During 2017 there were about 10,000 unemployed graduates (MEST, 2019).

**Conclusions**

Kosovo has shown progress in developing a unique strategy for the education sector and has aimed to change the national report on education system through annual reports on evaluation of KESP implementation and based on reports of the annual statistics published by the Department for System of Education Management Information (EMIS) and Kosovo Agency of Statistics.

The annual report of the evaluation of the KESP, the way it is written, provides general information about the education system in Kosovo and serves to the purpose and its primary function, which is the annual revision to the achievement of strategic objectives for 2021. The report is seen more as an internal and technical document in relation to the implementation of strategic planning, rather than a report that covers all developments in the education system in Kosovo. However, in addition to the annual statistical reports coming out from the information management system, the KESP evaluation report remains the only annual report covering the entire education system in Kosovo.

Development of regular reports on the educational system in Kosovo, in the context of Kosovo's efforts to integrate its education system in international mechanisms for education, should be seen not only by the idea of internal reporting, what is the internal progress, but also to pay due attention to development processes that ensure quality in education. Annual reports on the implementation of the KESP certainly should not be seen as single reports mandated to assess and ensure the quality of the education system in Kosovo.

The process of integrated reporting for the entire educational system requires evidence-based and transparent data, which can be easily used to prepare national reports and comparative analysis. It requires capacity for evaluation, reporting and use of data. Dealing with the KESP evaluation report as isolated and technical within the planning framework, inevitably leads to fading of the report, loss of confidence in its quality, and greater pressure to be able to report on mechanisms abroad. Therefore, discussions in the educational community in Kosovo should be supported on future developments regarding national education reports, on an approach focused on institutional and regular reporting, based on measurable indicators that enable preparation of a comprehensive annual report on education in Kosovo, which goes beyond reporting on completion of the Strategic Plan.

## Notes

[1] The Education Management Information System (EMIS) Management Information System in Higher Education (SMIAL), Kosovo Agency of Statistics (KAS), Ministry of Public Administration (MPA), etc.

[2] Labour Force Survey, National Tests (Semimatura and Matura), OECD PISA, etc.

[3] keen-ks.net/site/assets/files/1345/raporti_i_vleresimit_psak_alb-2.pdf
keen-ks.net/site/assets/files/1474/vleresim_afatmesem_i_psak_alb.pdf

[4] Benchmark and calculation of percentage is presented on pages 10 and 11 of this article.

[5] Kindergarten to grade 12 (including vocational education and training students)

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# *The Education Report for Luxembourg*

## LUXEMBOURG AT A GLANCE

- Population: 0.6 million
- GDP per capita: 119,573 USD
- Public expenditure on education: 3.1% of GDP
- Educational attainment (25–64 olds)

  Upper secondary/post-secondary (non-tertiary): 33%

  Tertiary: 44%

The figures refer to the following: population 2018, GDP 2019 current prices and current PPPs, public expenditure 2016, education attainment 2018 (tertiary includes short-cycle, BA, MA, PhD) Education at a glance, OECD (2019).

Luxembourg

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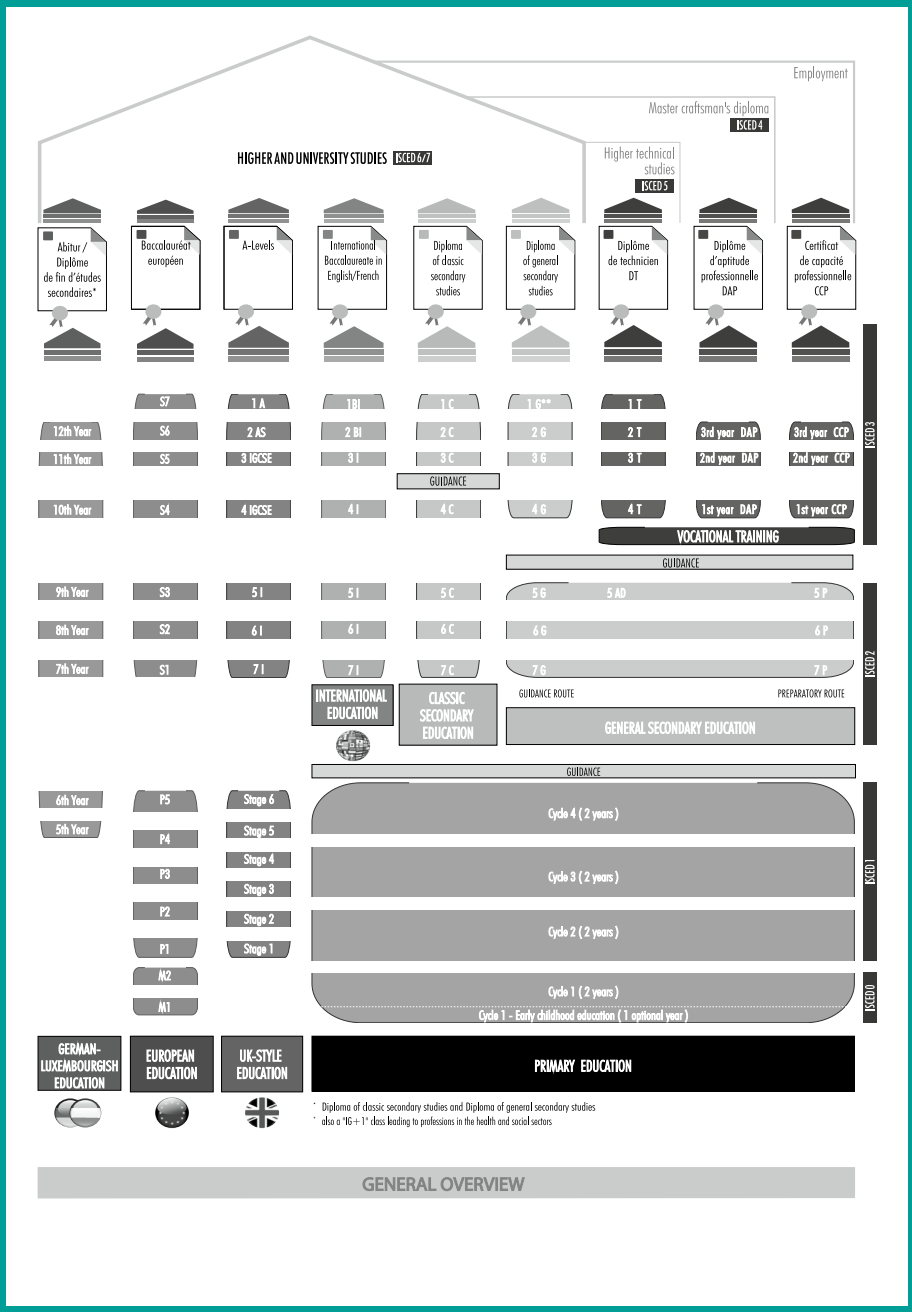
Thomas Lenz works as a research scientist and team leader at the Luxembourg Centre for Educational Testing (LUCET) at the University of Luxembourg. He is responsible for the national Education Report for Luxembourg and for the pedagogical part of the teacher training program at the university. Before that, he elaborated a research project on Luxembourgish school history and institutional change. He completed his PhD in Sociology at the University of Trier, Germany. Besides, he has worked as scientific collaborator at the University of Trier and has given courses at Hamline University, Minneapolis, USA and at the Babes-Bolyai University, Cluj-Napoca, Romania. He holds a Master's degree in Sociology as well as a secondary teachers' degree in German and Politics.

# Abstract

The national Education Report for Luxembourg is a joint venture between Luxembourg's Ministry of Education and the University of Luxembourg. The first Education Report was published in 2015 and will continue to be published every three years. The report is aimed at delivering a scientific overview of Luxembourg's education system and at enhancing an informed debate among politicians as well as in society in general about the future of education. It provides a detailed picture of institutionally grounded education from preschool to university. Conceptualised as an authors' report, more than 30 researchers have contributed to each volume. Thus, it combines official statistics and indicators with more complex scientifically grounded quantitative and qualitative articles.

The first part of this contribution provides a brief overview of the history, key features, and data backbone of the national Education Report. The section concludes with a brief outlook on future developments. The second part provides examples of charts and figures from the Education Report from 2018 to illustrate how topics are presented and discussed. As the topic of educational inequality is an important issue in Luxembourg, the examples address disparities among students.

# Education system



# Description of the report

**The origin of the Education Report for Luxembourg**

The first Education Report (*Bildungsbericht*) for Luxembourg, which was published in 2015 by the Luxembourg Ministry of Education (MENJE) and the University of Luxembourg's Faculty of Language and Literature, Humanities, Arts, and Education (FLSHASE), was an extensive study of institutionally grounded education in Luxembourg. In 2009, the Luxembourgish education system underwent a number of legislative changes, amongst others, a restructuring of the state departments, which were in charge of school development, quality, and innovation. In this context, school law became the legal basis for the Education Report (*Journal Officiel du Grand-Duché de Luxembourg, 2009*[1]), fostering the evaluation of the education system by requiring a report on the education system every five years. The first Education Report examined the education system from preschool to university and applied a multimethod approach. Based on the idea of lifelong learning, it considered all sectors of the educational system. The composition of the report differed from its US and German counterparts because it was less oriented towards being a purely indicator-driven model and was instead designed more like the reports in Austria and Switzerland. In these countries, the official statistics and the predefined indicators are augmented by scientifically founded studies, articles, and more complex – quantitative and qualitative – papers. Such an approach provided – for the first time in Luxembourg – a comprehensive integration across relevant fields and domains of expertise. 35 researchers, most of whom came from the research unit Education, Culture, Cognition, and Society (ECCS) at the University of Luxembourg and the Luxembourg Centre for Educational Testing (LUCET), described what exactly influences educational trajectories in Luxembourg. This first report focussed on two highly relevant topics in the Luxembourgish educational field: social inequalities and plurilingualism. Trilingualism is a key characteristic of the Luxembourgish education system, resulting in different benefits and challenges. Educational inequalities have repeatedly been diagnosed in large-scale studies (e.g. PISA) and have shown that inequality and plurilingualism are heavily intertwined and influence each other when it comes to educational success or failure: For example, a family's socioeconomic status has a large influence on a child's educational success. There is also a correlation between success in school and a child's language background because children who do not speak one of the three national languages at home must successively learn Luxemburgish, German, and French to make it through the education system.

The Education Report was very positively received by the Luxembourgish society, and it helped to promote an informed debate on educational topics in

politics and society. Therefore, the Ministry of Education asked the university to provide an Education Report every three years. The university's last two four-year plans (4YP 2013–2017; 4YP 2018–2021) have included the education report as a central aspect of making education a priority in research.[2] The Education Report of 2018 demonstrated that it is possible and makes sense to publish the report every three years. It also showed that the production of the Education Report needed to be streamlined, and with regard to the contents, its focus needed to be sharpened. Finally, it showed that there was a lot of potential for synergies if the authors and the coordinators of the report would collaborate with the LUCET researchers more closely. To make use of these synergies, the Education Report is now part of the LUCET portfolio, and this well-established structure can thus be used to further professionalise the appearance of the report.

**The Education Report for Luxembourg at a glance**

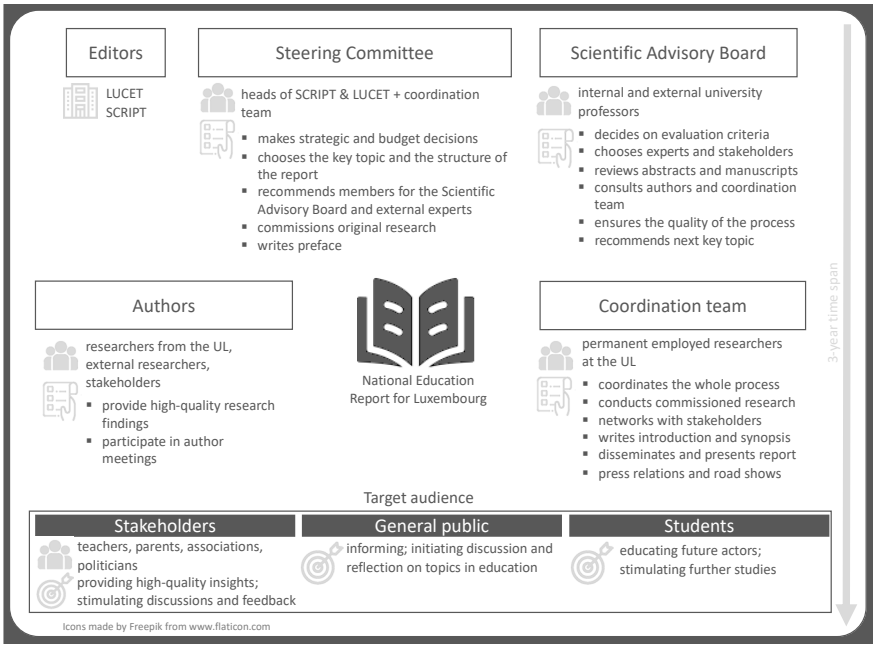
The Education Report for Luxembourg concentrates on the formal educational institutions and covers them from kindergarten to university. The primary and secondary schools are at the centre of the analyses, and the report delivers a scientific overview of the Luxembourgish educational system from a micro-, meso-, and macro-perspective.

The national Education Report does not make direct recommendations for political measures, but the findings help to identify the areas and the challenges that will need to be tackled in the future. It provides science-based information about the general conditions, features, and results of educational processes in Luxembourg.

The Education Report is published by LUCET and the Ministry of Education (*Service de la Coordination de la Recherche et de l'Innovation pédagogiques et technologiques, SCRIPT*) every three years. The report is organised by a coordination team at LUCET, and it is financed by the University of Luxembourg and the Ministry of Education. Its main topics are jointly defined by the members of the Steering Committee, comprising the heads of LUCET and SCRIPT (see Figure 1) at least three years before the publication. In addition to one main topic, certain overarching topics (e.g. social inequality and multilingualism) are continuously included in the Education Reports. A scientific advisory board, consisting of professors from the University of Luxembourg as well as external experts, accompanies the production of the report. The articles are mainly written by scientists from the University of Luxembourg,

but additional articles can come from stakeholders in the Luxembourgish educational field and external experts. The authors are encouraged to package the results of their research projects in a manner that is accessible to a broader audience and offers a good balance between scientific accuracy and general comprehensibility.

*Figure 1: Organisation chart of the Education Report for Luxembourg*




Target groups for the report are the interested public, stakeholders in the educational field (e.g. teachers, parents, and students), the ministry, and the press (see Figure 1). The Education Report is explicitly designed to be a report for the general public.

The launch of the report is done via a press conference, which is followed by many presentations of the report to different audiences. The editors and coordinators of the Education Report present the key findings at meetings with, for example, teachers, teacher unions, parents, and members of parliament. This 'roadshow' is an excellent tool not only for showing the research to stakeholders, teachers, and parents but also for discussing the consequences of this research and for gathering insights and ideas for the next iteration of

the Education Report itself. The report is also a vital part of the teacher training that is being done in the Master of Secondary Education program at the University of Luxembourg.

3,000 copies of the report are printed, and nearly all of them are given to different stakeholders. The report is published in German and French, and a digital version of the report is available on www.bildungsbericht.lu.

**At the heart of the data: ÉpStan**

Much of the data for the Education Report are provided by the so-called *Épreuves Standardisées* (ÉpStan), a set of standardised tests that are administered every year at the beginning of each new learning cycle of mandatory schooling (in grades 1, 3, 5, 7, and 9) in all schools in Luxembourg and function as a school monitoring tool. The ÉpStan are therefore not a sample but a complete inventory of competencies in key learning areas. The ÉpStan examine whether the educational goals from the previous learning cycle have been achieved (e.g. students in grade 9 are tested to determine whether the educational goals from grade 8 have been achieved). To ensure a fair performance comparison, the ÉpStan systematically take into account students' socioeconomic and sociocultural backgrounds.

One particular feature of the national monitoring system is that the feedback from the results of the ÉpStan is located not only on a system level but across all levels (school, class, student). Through the ÉpStan, LUCET is assembling a unique and rich longitudinal database in which the panels are actually entire cohorts, containing information about the evolution of students' competency profiles and their pathways through school. Besides the ÉpStan data, the Education Report relies on administrative data by the Ministry of Education as well as data sources that are collected and analysed by the different authors who are contributing to the respective volume.

**The future of the Education Report**

The abovementioned key features will remain the same for the upcoming Luxembourgish Education Report (2021). It will be an authors' report supported by more than 30 researchers from the University of Luxembourg. In addition, the upcoming volume will include a few contributions from international experts and stakeholders in the local field (e.g. pedagogical centres,

network offices). In the next iteration of the Education Report, articles will be separated by pages that contain figures and info graphics (factsheets) from the Luxembourgish Statistical Office (e.g. numbers of students, graduation rates, data on educational expenditures), analyses of (inter)national surveys that are carried out periodically (PISA, ÉpStan, EUROSTUDENT, ICILS), as well as national and international research. The factsheets will contain indicators that will be continued in future editions and will help monitor educational progress over time. Apart from the overarching topics of educational inequality and multilingualism, a special focus of the Education Report 2021 will be on digitalisation and sustainability. As these topics cannot be covered by existing data resources, a novel feature of the next report will include data collection and analyses.

# Extract of the report

**Examples of the Education Report 2018 – trajectories in education and competence development**

The national Education Report for Luxembourg 2018 focussed on educational trajectories. Based on longitudinal data (administrative panel data and sophisticated educational monitoring), parts of the 2018 report on educational pathways and competence development are presented here. As the topic of educational inequality is an important issue in Luxembourg, the selected examples deal with disparities among different student groups. Further, the examples illustrate how the Luxembourgish Education Report is conceptualised as an authors' report (similar to an edited book) and how it provides deep analysis, elucidated with the help of graphs and figures.

**Orientation after primary school depending on region**

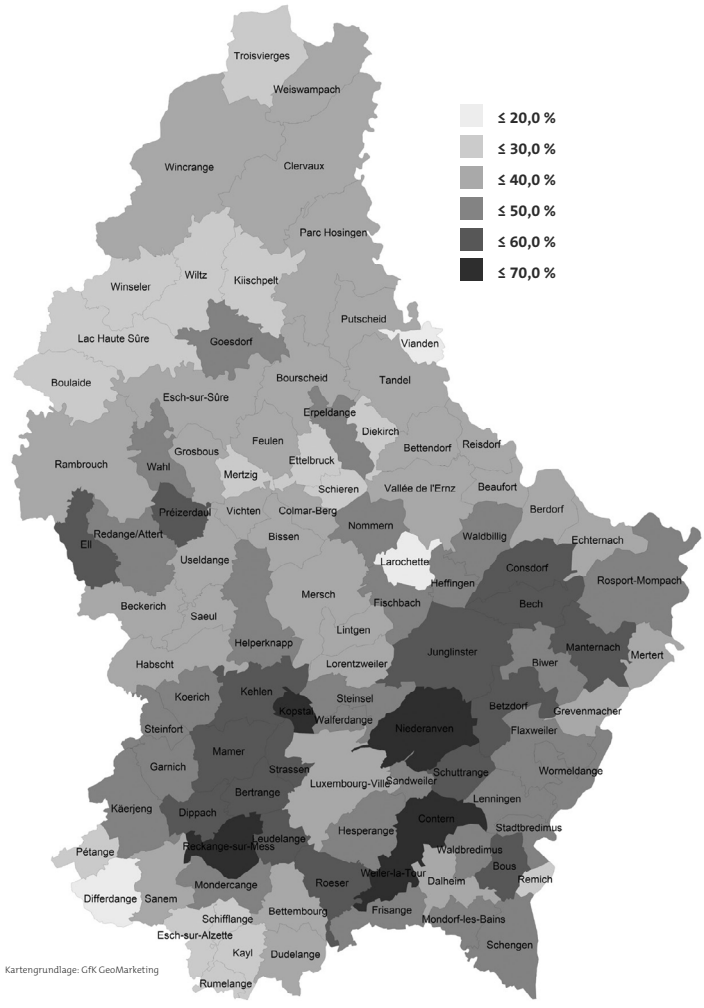
The transition from primary to secondary school not only means changes in pupils' daily lives (e.g. a new route to school, new teachers, new classmates), but it also marks a significant crossroad for their future educational and professional careers. In Luxembourg's stratified secondary education system with educational tracks that lead to different certifications, the transition from primary to secondary school is particularly momentous because it influences students' future opportunities. Besides considering factors that researchers have identified as having an impact on the decision that is made at this transition, such as a student's immigration or socioeconomic status (Schaltz & Klapproth, 2014), it is important to analyse how regional differences also come into play.

To depict the recommendations that students received after grade 6 for their transition to secondary school, geographical maps at the municipal level were generated. Administrative data for school years 2009–2010 through 2016–2017 were compiled, and the percentages of recommendations for particular school tracks were averaged (Lenz & Heinz, 2018).

Figure 2 shows the proportion of recommendations to pursue the academic track. It can be seen that the transition rate to the academic track is rather low in the north of the country, whereas it is high in the centre of Luxembourg. In the more industrial south, the transition rate from primary school to the academic track is again noticeably lower. Conversely, the opposite pattern is observed for the recommended transitions to technical and vocational tracks. As municipalities differ greatly in terms of the proportions of Luxembourgers, Portuguese, and people with other nationalities who live there – and given

the association between immigration background and socioeconomic status – the differences in the recommendations for the different types of secondary schools are considerable (ibid.). These findings support discussions about sociospatial measures.

*Figure 2: Percentages of students oriented towards an academic school track after primary school*



**Competencies of first-graders and their development after two years, depending on the language spoken at home**

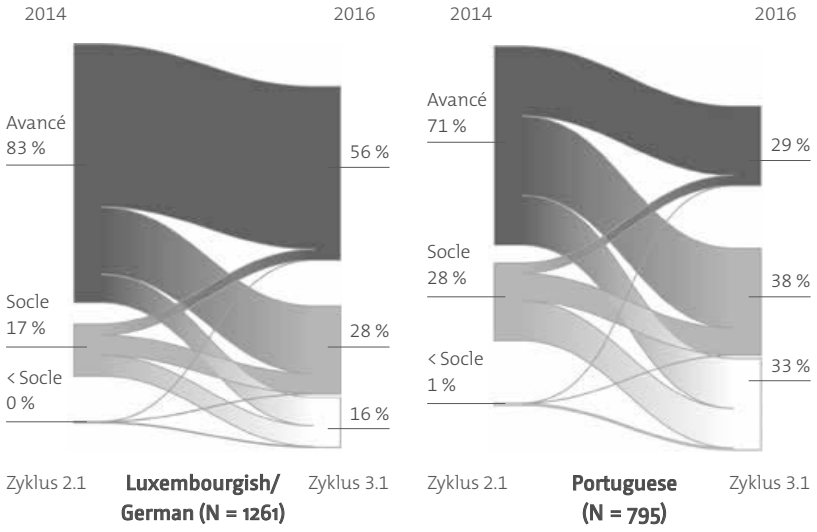
According to the developmental psychology of childhood, the first six years of life are crucial when it comes to the development of memory, language, attention, and cognitive functions, all of which are prerequisites for learning in school. Not all students develop these basic skills in the same way (e.g. because different resources are available at home). Accordingly, monitoring the development of early competencies in primary school is important (Hoffmann et al., 2018).

The Luxembourg school monitoring programme, *Épreuves Standardisées* (ÉpStan), administers standardised tests in mathematics, Luxembourgish, German, and French. These tests are administered every year to all students in grades 1, 3, 5, 7, and 9. In primary school, the ÉpStan assesses whether educational goals, defined as minimal standards (*socle*), have been achieved or exceeded (*avancé*). The results of the longitudinal analysis ranging from grade 1 (in 2014) to grade 3 (in 2016) are based on scores from about 3,900 students (ibid.). Sankey diagrams illustrate the number of students reaching the same competence level after two years, and the number of students whose score levels improve or decline.

In summary, the minimal standard in the core competencies is achieved at the beginning of primary school. In mathematics, for example, 99% of first-graders achieved at least the minimal standard (data not shown). In fact, the majority of first-graders (78%) reached the advanced level. However, the pupils' mathematics competencies after two years show that the distribution became negative, as many children (23%) did not reach the minimal standards (*socle*). Figure 3 compares the development in mathematics of Luxembourgish/German-speaking pupils and Portuguese-speaking pupils. The data show that Portuguese students (as the largest immigrant group) were more affected by a decrease in achievement level: In grade 1 (*Zyklus 2.1*), only 1% of the students did not reach the *socle*, but in grade 3 (*Zyklus 3.1*), one third of the Portuguese students belonged to this group. For the Luxembourgish/German population, the percentage of low achievers increased from less than 1% to 16%. The development of competence in the languages that were tested mirrored these patterns. The results are particularly revealing in view of the complex language situation in Luxembourg (it has a trilingual language regime, and the language of instruction changes over time), which is particularly challenging for immigrants. International studies on secondary school students (e.g. PISA) have repeatedly observed that extracurricular factors (e.g. parental

background) strongly influence test results in Luxembourg (ibid.). The ÉpStan monitoring tool helps to determine when the social gap is becoming wider and can help identify potential implications.

*Figure 3: Development of mathematics skills in grades 1 and 3 for selected language groups*

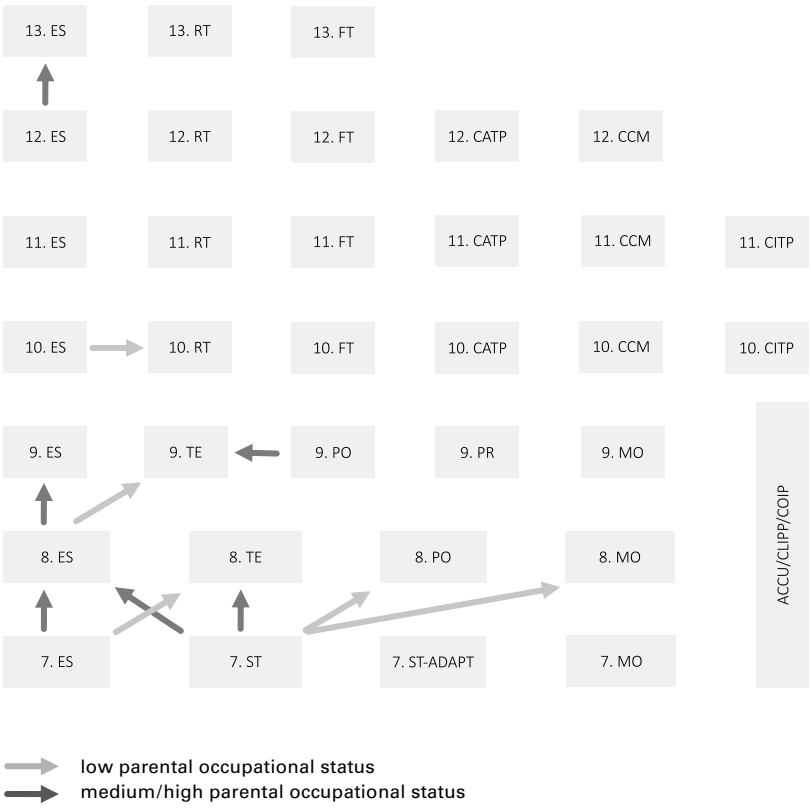



**Changes in school tracks in secondary school, depending on students' social backgrounds**

A key characteristic of educational systems is their degree of stratification (i.e. differentiation in multiple parallel school tracks). Luxembourg's school system is characterised by a very high degree of stratification as students are oriented towards different tracks after grade 6. International research has shown that educational inequalities are greater in stratified systems (Pfeffer, 2008; Van de Werfhorts & Mijs, 2010). As an example, working-class students are more often oriented towards lower school tracks in Luxembourg than students from a higher social background (cf. SCRIPT & LUCET, 2016; SCRIPT & FLSHASE, 2015). Stratified systems themselves differ in the extent to which students have the opportunity to change school tracks (i.e. permeability). A main concern of this chapter of the Education Report is whether or

not students remain in the track they were placed in or if they change tracks. In multiple figures, the student groups that tend to change tracks at particular branching points are identified.

*Figure 4: Significant differences in the proportions of transitions between students from different social origins (measured via highest parental occupation; Chi² tests)*[3]




The database containing the descriptions of the reorientations in secondary school is an administrative panel data set of all 5,301 students born in 1990 who were registered at least once in a Luxembourgish secondary school that follows the official national curriculum. The arrangement of the diagrams is

based on the official depiction of Luxembourg's school systems (from left to right: academic to vocation/preparatory tracks; from the bottom to the top: 7th to 13th grade; MENFP, 2011). Each box represents a grade in a particular school track. In the example in Figure 4, arrows indicate that a transition takes place significantly more often for a particular group, namely, students from high vs. low social strata (Hadjar et al., 2018).

Figure 4 represents a segment of the original figure in the Education Report and shows that class-specific differences occur early in secondary school, typically after grade 7. Working-class students (shown in lightgrey) significantly more often switch to less-demanding tracks than students from higher social strata, whereas the latter are more likely to switch to academic tracks or remain in academic tracks (shown in darkgrey) than working-class students. Class-specific upward changes made by socioeconomically privileged students occur at less prominent points (i.e. branching points that are hardly advertised as permeable in official documents). In summary, Figure 4 illustrates that existing educational inequalities (e.g. the fact that working-class students are underrepresented in high-achieving tracks in grade 7) tend to increase as working-class students are more likely to switch to less demanding tracks in relation to students with higher social backgrounds. These patterns differ noticeably when considering gender-specific educational choices (which occur later in the educational trajectories) or immigration-specific differences (ibid.). Accordingly, different implications for different branching points can be derived.

## Notes

[1] Loi du février 2009; Mémorial A–N°. 19; Art. 7: *Un rapport descriptif de la qualité du système éducatif est élaboré tous les cinq ans par un groupe d'experts désignés par le ministre en collaboration avec le Conseil scientifique prévu à l'article 20* [Translation: A descriptive report on the quality of the education system is to be provided every five years by a group of experts appointed by the minister in collaboration with the scientific council as per article 20].

[2] The last 4YP announced that it would further develop the national report on education (*Bildungsbericht*) by focussing more systematically on key questions of the Luxembourg education system (validated in February 2018, p. 20).

[3] The numbers in the boxes represent the school grades. The letters stand for the school tracks (e.g. 7. ES means 7th grade in the academic track; 9. PR means 9th grade in a practically oriented track; 10. CATP means 10th grade in vocational training).

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# *The State of Education in the Netherlands*

## NETHERLANDS AT A GLANCE

- Population: 17.2 million
- GDP per capita: 59,419 USD
- Public expenditure on education: 5.1% of GDP
- Educational attainment (25–64 olds)

  Upper secondary/post-secondary (non-tertiary): 40%

  Tertiary: 38%

The figures refer to the following: population 2018, GDP 2019 current prices and current PPPs, public expenditure 2016, education attainment 2018 (tertiary includes short-cycle, BA, MA, PhD) Education at a glance, OECD (2019).

Netherlands

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Inspectorate of Education & Maastricht University

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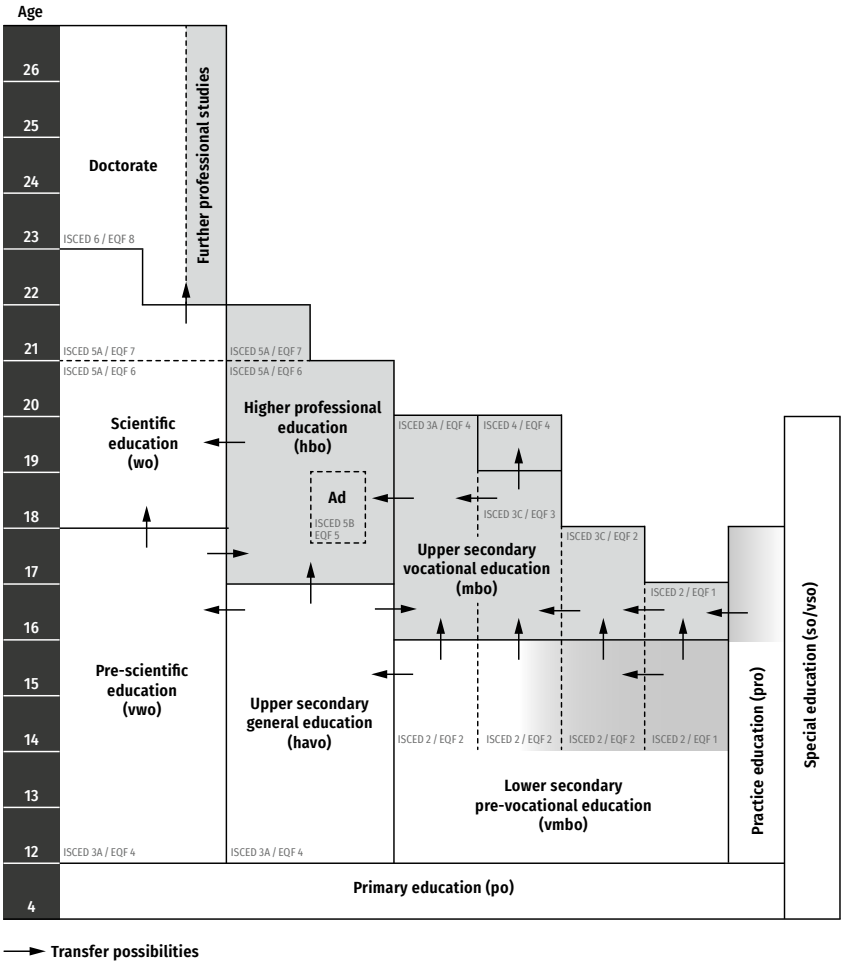
**Dorien Zevenbergen**
Programme manager State of Education
Inspectorate of Education & Maastricht University

Dorien Zevenbergen is since 2019 responsible for the State of Education in the Netherlands. This yearly evaluation of the Dutch education system highlights trends and developments and signals issues within the system such as declining educational outcomes or inequality of opportunities for students. Previously Dorien Zevenbergen worked as a policy advisor for the Dutch Department of Education, the municipality of Amsterdam and the European Commission. She has a background in philosophy, psychology and teaching.

# Abstract

The State of Education is a systematic review of developments in Dutch education. It serves as a basis for evaluation of education practice and the education system, and provides input for education policy. The State of Education is published since 1817 by the Inspectorate of Education. The report is based on research, which is presented in readable report with infographics. The production process is characterised by cocreations within multidisciplinary teams (including inspectors and academics). The impact of the Dutch State of Education is high. It is an important background report for education practitioners, policy makers, politicians, media and academics. This is not only a consequence of the high quality, the relevance, the neutral/independent character and the readability of the report, but also of the dissemination activities and dialogue after the publication. One of the major topics in the State of Education in the last years has been inequality in education. The report showed that inequality increased in Dutch education. In the last decade, the success of students became more dependent on their socioeconomic status. In the years 2016–2020, the State of Education discusses different underlying mechanisms that caused this increase in inequality, like segregation, teacher bias, support, school differences and unequally distributed teacher shortages.

# Education system



# Description of the report

**Institutional details**

Since 1817, the Dutch Inspectorate of Education publishes the State of Education. This annual report describes developments and key themes in the Dutch education system. The report reflects on major developments and on facets of education that are in need of improvement. The long tradition of over two centuries of the State of Education gives a unique historic insight in strong and weak elements of the Dutch Education system.

The State of Education really reflects the state of Dutch education in a specific year. This means that the scope of the report is broad, from kindergarten to universities. The rationale behind this broad and holistic approach is to focus on the education system in total, not only on parts of the education system in the Netherlands. This is because strong and weak elements can be found in all parts of the system, as well as in transitions between parts of the system.

The Dutch State of Education is published every year. This has always been the case; there are over 200 States of Education published since 1817. The annual periodicity is not discussed because of this long tradition, as well as the high quality and relevance of the State of Education in the Dutch education system and education policy. The annual periodicity is even a legal obligation, as the Constitution says that 'The government shall submit annual reports on the state of education to the States General' (Art. 23, lid 8).

The Constitution says that the Dutch government, the States General, is the main target group of the State of Education in the Netherlands. However, in practice, the annual report is also written for teachers, school leaders, school boards and other practitioners and policy makers in education. The aim of the report is to improve education in the Netherlands through a description of strong points and challenges in Dutch education. The impact is the highest by aiming directly at educational practitioners, providing them with benchmark information, discuss specific topics that need improvement and organise learning within and between schools.

**Goals and function of the report**

The overall aim of the State of Education is to improve education in the Netherlands. By analysing developments, strong/weak elements, and differences between schools and regions, it gives a unique insight in the functioning of Dutch education. It not only provides benchmarks and trends, but also results

in an overview of strong elements as well as challenges in education. This is used for further improvement of education, at all levels: within classrooms, schools, school boards, in regions and at a national level.

The legal basis of the Dutch State of Education is strong, the report is mentioned in the Constitution of the Netherlands (see above). It is made by the Inspectorate of Education, because of the independent position of the inspectorate and its unique information position, with inspectors visiting all schools every four years. The independency of both the report and the inspectorate allows for the inspectorate to present and discuss the report with Dutch parliament, even without the minister present. This unique position is not seen in other inspectorates in the Netherlands. It is a result of the long tradition, the high quality of the State of Education and the independency of the Inspectorate of Education in the Netherlands. This independency is cherished and guarded, because it is not always appreciated by all stakeholders.

The State of Education report starts with a thematic chapter in which major topics are described. These topics are generic (trends in student results, equity, teachers and principals) or focus on specific challenges in Dutch education (like innovation). The general themes come from an academic conceptual model on quality of education (de Wolf et al., 2020), which distinguished between various functions of education. The specific themes are the major research topics of the Inspectorate of Education. Input for these research topics is given by various stakeholders in the education field, as well as results from previous States of Education and results from international comparisons (of PISA, TIMSS, PIRLS, ICCS and TALIS).

The thematic chapter is followed by chapters that focus on primary education, secondary education, special education, vocational education and higher education. These chapters describe the general trends, as well as in depth analyses of the thematic topics for their specific sector. These chapters also include results of specific thematic research of the inspectorate in the sector, like for example illiteracy in primary schools, exams in secondary education, safety in special schools, school dropout in vocational schools and student satisfaction in higher education.

Most of the topics are follow through for a few years. During the first year, the State of Education includes a basic description of a new topic, like a specific trend in a certain topic. This is followed by more in depth descriptive analyses in a second year. Examples of these descriptions are differences between schools, regions and sectors. The third year gives explanations, describes

underlying mechanisms, causal relations and insights in what works. This third year is based on cooperation with academics and longer-term research. After three years, the topic is replaced or followed by a new topic, with which the three-year-cycle starts again. In general, there is one new topic every year.

Almost all topics and chapters are described from students' perspective. This perspective ensures that all descriptions are focused on learning and development of pupils and students, cognitive and social emotional. This focus is the main evaluation criteria of the State of Education. More detailed criteria are not used, neither are norms used. The only exception are legal prescriptions and norms used in children's rights and international agreements.

**Production of the report**

The trends and topics are based on national and international data. Most data sources are existing data sources. National sources include assessment results of school inspections, student assessment results (test scores, exams), teacher data (age, degrees, mobility) and finance data. International data include data on student results (PIRLS, TIMSS and PISA), social competences (ICCS) and teachers (TALIS). Lack of data is no longer an issue for the State of Education, due to the availability and variety of education data in the Netherlands. There is so much data available, that the main challenge is to use, combine and interpret the information and to draw conclusions based on this data. The combination of the data sets enables the inspectorate to draw conclusions based on developments on various aspects (from student results to expert assessments) and on different levels (student, school and national level).

On some topics, there are hypotheses that can only be tested with more data. This was the case with inequality in education. Inspectors sensed that inequality was growing and segregation was increasing, but initially the inspectorate was not able to test these hypotheses. In order to describe developments on inequality in education, you need information on background characteristics of students (like socioeconomic status, income and ethnic background of students). In order to solve this lack of data, the inspectorate applied for a special status at the national statistics bureau (CBS), a status that enabled the researchers of the inspectorate to use individual background characteristics for their research. With this (academic) status in 2015, the inspectorate was able to conduct more in depth analyses on the influence of social economic status, income, migration background and neighbourhoods. These

analyses showed that inequality in education was indeed increasing in the Netherlands, inequality doubled in the last decade. This major finding has been published in the State of Education in 2016 and inequality is one of the topics that is monitored annually (Inspectorate of Education, 2016).

The data analyses for the State of Education is done by a specific team of researchers, in collaboration with inspectors and academics. They work in small, topic oriented teams. There are also specific research projects commissioned for the report. These are planned research projects of the inspectorate, additional research projects for the report and/or academic research projects in which researchers, inspectors and academics work together. This last group of projects is part of a long term collaboration between the inspectorate and specific universities in academic workplaces and the Education Lab NL.

After the teams made the content, the inspectorate invests in the finalisation of the report. There are two challenges in this last phase of the production: infographics and editing. Infographics are used to present the most important results of the State of Education. These infographics are very powerful in communicating results and conclusions. The inspectorates hires top specialists to design and make these infographics. In recent years, the infographics of the State of Education won several Dutch and American prizes for best infographics. Most infographics are well designed graphs, that are used in print and online. The inspectorate also experimented with interactive infographics, these are only available online. In addition to the infographics, there are simple tables and charts. The results are also described in technical reports (for online publication) and most data is available as open data (also online and on request). The final editing of the report is done by the chief editor, who selects, deletes, reduces and rewrites most parts of the report. For some parts, the inspectorate uses communication specialists or an external editor to assist and to give suggestions in order to make the report readable for education practitioners and a broader public.

**Dissemination**

The State of Education is published in paper and available on www.onderwijsinspectie.nl. There is a Dutch and an English version available. The publishing is a large media-event, with media coverage in newspapers and on television (including the daily news). In the day before publishing, the media and the stakeholders are informed about the main topics and conclusions and can get a (confidential) issue of the report.

On the date of publishing, the inspectorate organises a conference for 1,200 practitioners and stakeholders in education. This conference is also called 'the State of Education' and booked weeks before it takes place. One of the highlights of the conference is the presentation of the report and the symbolic handover of the report to the Minister of Education. This is followed by around 50 workshops, organised by either makers of the State of Education, stakeholders or experts in the educational field. With this conference, the inspectorate stresses that the report is made for teachers, school leaders, school boards and policy makers. For all these stakeholders, the report is important background information. Co-productions, in terms of similar reports or workshops, are stimulated and also presented at the conference 'the State of Education'.

The dissemination does not stop after the date of publishing, but just starts at this day. It is followed by interviews, lectures, workshops, regional conferences, articles, etcetera. These activities are partly planned by the inspectorate, but most of the activities are on request. Stimulating the dialogue on the main topics of the State of Education is the goal behind these dissemination activities.

The inspectorate evaluates the project, the report and the dissemination process every year. Lessons learnt provide input for the report and production process of next year. The evaluation is also followed by quality measures at a later stage, like for example a questionnaire among readers, stakeholders and practitioners in education.

**Future developments**

The annual State of Education report is an influential report within Dutch education and education policy partly because it combines strong academic research with information which inspectors retrieve in their daily school evaluations. In the future we aim to strengthen the combination of these two types of information to further improve our system evaluation of the Dutch education. In order to do so, we will place a greater emphasis on high level qualitative research amongst inspectors and schools, which will allow us to give more insight into the context of the more quantitative analyses, provide more nuance and give more practical recommendations to schools, school boards and (regional) policy makers.

In line with the new mission of the Dutch Inspectorate of Education the findings and recommendations made through this method of system evaluation

will also shape the type of inspections done at the level of schools and school boards. Whilst retaining a grip on the general quality of individual schools and school board, it will allow inspectors to investigate certain topics which are of importance within the Dutch education system, but perhaps immediately apparent only at the system level. Inequality of opportunities within the education system are an important example of this, discussed in more detail in part two of this essay.

# Extract of the report

**Research on equity in Dutch educational system**

Equity in the Dutch educational system is a recurring topic in the yearly publication of the State of Education. The reason for this is a traditionally strong emphasis in the Dutch educational system on equal opportunities in education. It is one of the most important criteria used in the systematic evaluation of the performance of the Dutch educational system in the State of Education.

Each year the thematic part of the report delivers a sequence of analyses on this topic. The State of Education has covered many different aspects of equality of opportunity such as 1) differences in performance and opportunities related to socioeconomic background of the students, 2) large differences in quality of schools, 3) increasing school segregation, 4) unequal opportunities between immigrants and natives in transition to the labour market, 5) differing quality of educational provision to children with special educational needs, among other aspects. The main results of this research are illustrated by the various figures in this chapter. They provide an overview of the main findings on this topic and how they have informed the public in the past years.

Here we take the opportunity to highlight one research topic that has gained a lot of public attention: research published in 2016 on raising inequalities in transition to secondary education. More specifically, this research has focused on the consequences of the policy change introduced in the school year 2014/2015, which changed the criteria of selection into secondary education, at age 12. Within a system of early and detailed tracking – like the one with seven tracks in the Netherlands – it is important that the criteria of selection are as objective as possible. Therefore, traditionally the placement into secondary education was based on the combination of the results on standardised tests and teacher recommendations. It is likely that due to these rather objective criteria of selection the Netherlands managed to keep high levels of equality of opportunity in secondary education as shown by various rounds of the PISA study (OECD, 2019a).

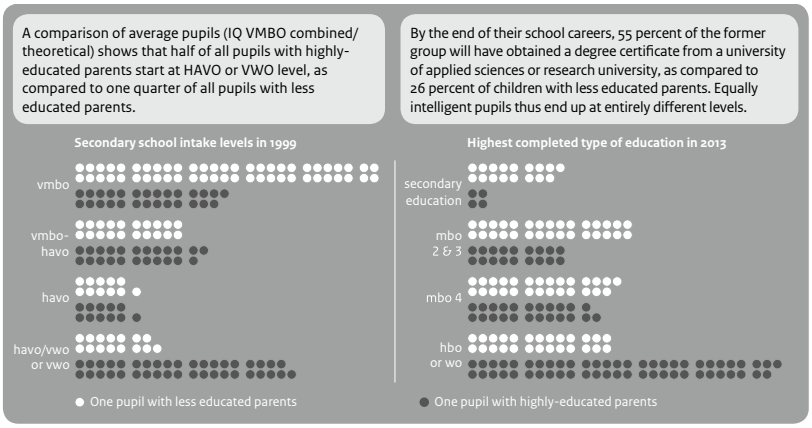
The reform in 2014/2015 has effectively placed more emphasis on teacher assessment, thus diminishing the objectiveness of selection. This reform was inspired by the assumption that cognitive test scores were used too restrictively and that teachers would be able to better recognize the true potential of students. The reform prompted a lot of discussion about the consequences on the equality of opportunity, as international research traditionally showed that teacher judgement is more often than not likely to be biased in favour of children from advantaged backgrounds (Waldinger, 2006; for Netherlands-specific

findings, see (Timmermans et al., 2015). In addition, 'wrong placements' in tracks are hard to revise, as the permeability of the system is rather low. Once placed in the certain track students tend to remain there (OECD, 2016).

In the 2016 State of Education we took the opportunity to analyse the consequences of this reform, making use of rich administrative data in the Netherlands. These data provide information on each student in the Dutch educational system and allow insights into student's prior performance measured by standardised tests, socioeconomic background, track recommendations given by teachers as well as track placement and progressions throughout secondary education.

The results of the analyses indicated that the initial worries of inspectors, many scholars and opponents of this policy change were justified. Figure 1 shows that students that have comparable cognitive scores but different parental background end up having hugely different educational trajectories. By the end of their school career, 55% of the students with highly educated parents will obtain a degree certificate from university, as compared to 26% of the children with less educated parents.

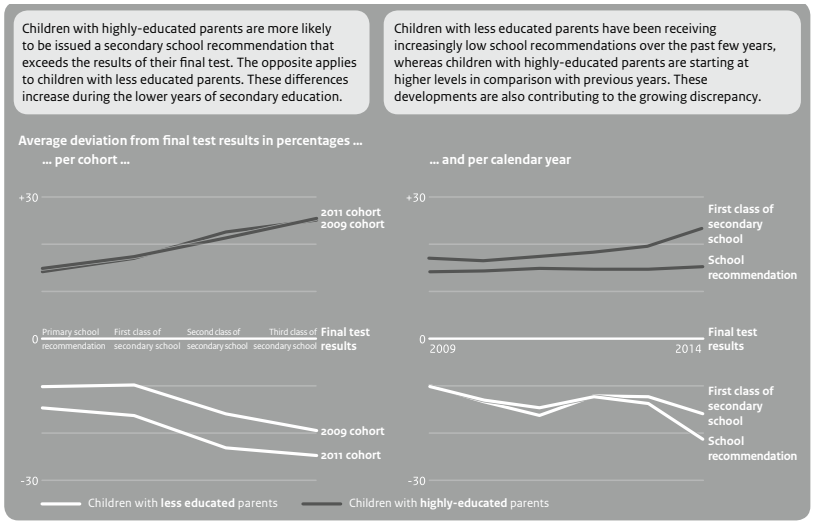
*Figure 1: Educational trajectories and parental background*




Note: For the abbreviations used (vmbo, vmbo-havo, havo, etc.), see the illustration of the education system at the beginning.

Figure 2 shows the discrepancy in recommendation between pupils with similar test scores but different socioeconomic backgrounds over the years. The left side of this figure shows after initial selection the differences between students from low and highly educated parents tends to increase. This happens during the first three years of secondary education. The right sight of this figure shows that the difference between high and low socio-economic background has increased in the year of the reform. In the school year 2014/2015, a higher percentage students from families with low socio-economic background were more likely to be assigned to lower education levels than in previous years.

*Figure 2: School recommendations, in relation to parent's level of education*

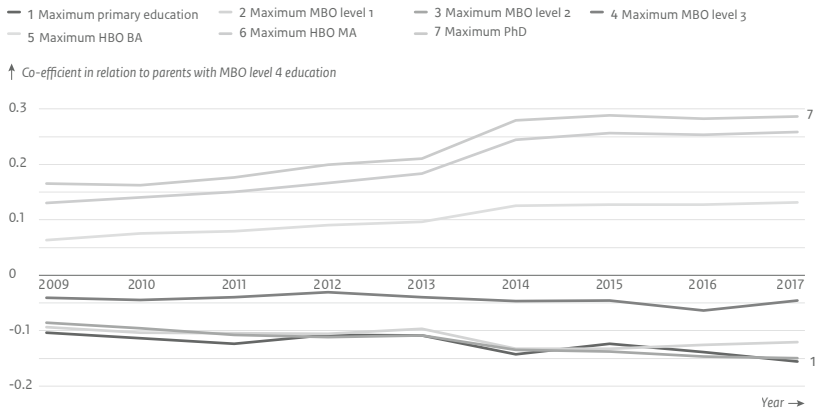



The research published in year 2016 in the State of Education showed that this policy change has amplified a trend that has started to develop unnoticed in the rather egalitarian Dutch education system: the one of increasing inequality. The subsequent editions of the State of Education have closely followed the development of this trend. Recent research (Inspectorate of Education, 2017, 2018, 2019) showed that the increase in the equality of opportunity has stabilised, but has not diminished and that the discrepancies remain twice as high as they were ten years ago (see Figure 3 below, where the bottom line 1 to the

line 7 at the top show the educational level of the parents). The PISA 2018 results confirm the decrease of equity in Dutch education in the last decade; there is a decrease in test scores for students with a low socioeconomic background (SES) and in the percentage of top performing SES students, while the results for high SES students are stable over time (OECD, 2019b).

There are two possible explanations for the manifested stabilising trend as put forward by the State of Education 2019. One is that the report published in 2016 has generated awareness of the problem, resulting in various initiatives to counter the raising inequality. One example of such an initiative was the establishment of so-called Alliance for Equal Opportunities by the Ministry of Education, with the aim to combat inequality of education and especially those related to transitions to next educational levels. Such initiatives can have had an effect and contributed to stopping the trend. Also, many primary schools have adopted their recommendation practices and now involve several colleagues in this process (Oomens et al., 2017). Another possible explanation is that the policy change did indeed strongly amplify the inequality of opportunity in the transition to secondary education. If the latter is the case, this adds up to the mounting evidence on teacher biases and the possible consequences of those.

*Figure 3: Equality of opportunities in primary education. Discrepancy between final recommendation and test recommendation, in relation to parent's level of education (2009–2017)*




*Source: calculations based on microdata from Statistics Netherlands*

## Notes

[1] In stratified systems children are separated (sometimes at lower secondary level) into different educational tracks according to their abilities and follow very different educational programmes. These education systems are typically found in German-speaking countries, Eastern Europe, Flanders and the Netherlands and can be more or less stratified depending on the age at selection and/or the number of programmes they offer to students (see Bol & van de Werfhorst, 2013; Prokic-Breuer & Dronkers, 2012).

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# *The Norwegian Education Mirror*

## NORWAY AT A GLANCE

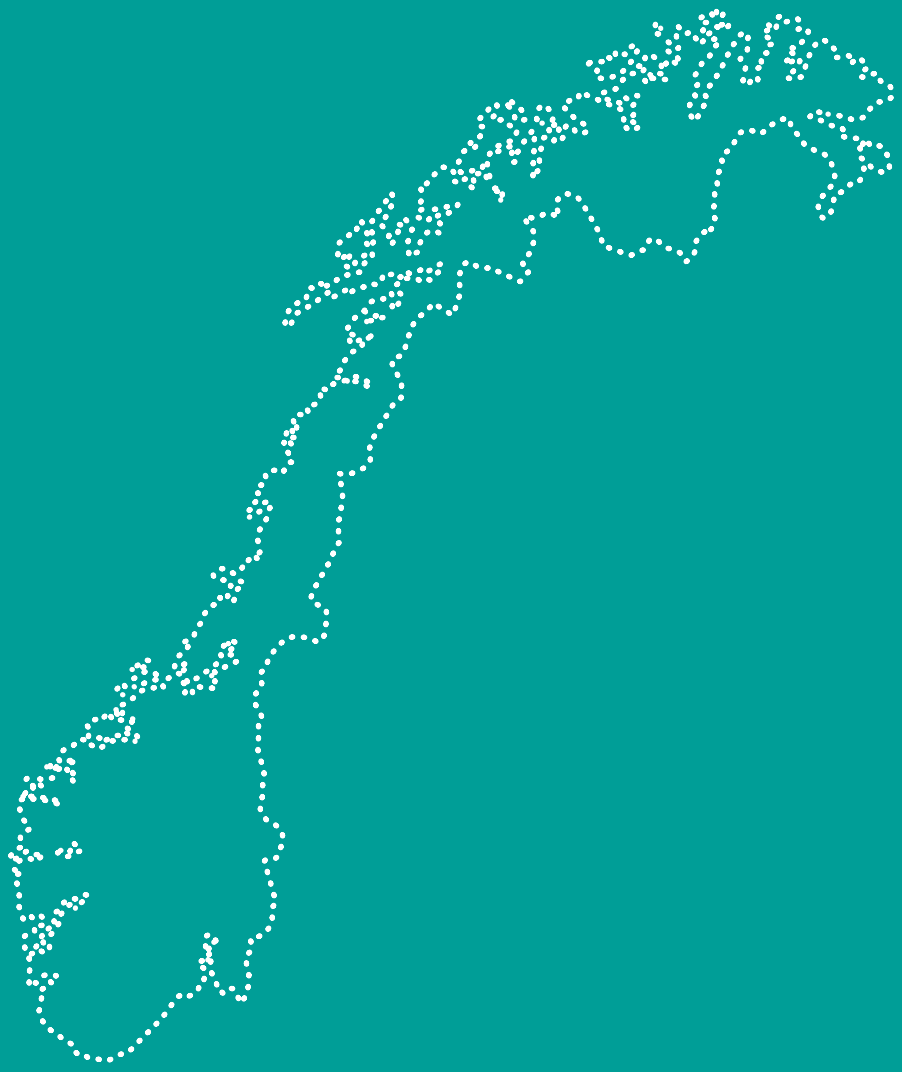
- Population: 5.3 million
- GDP per capita: 68,824 USD
- Public expenditure on education: 7.2% of GDP
- Educational attainment (25–64 olds)

  Upper secondary/post-secondary (non-tertiary): 39%

  Tertiary: 44%

The figures refer to the following: population 2018, GDP 2019 current prices and current PPPs, public expenditure 2016, education attainment 2018 (tertiary includes short-cycle, BA, MA, PhD) Education at a glance, OECD (2019).

Norway



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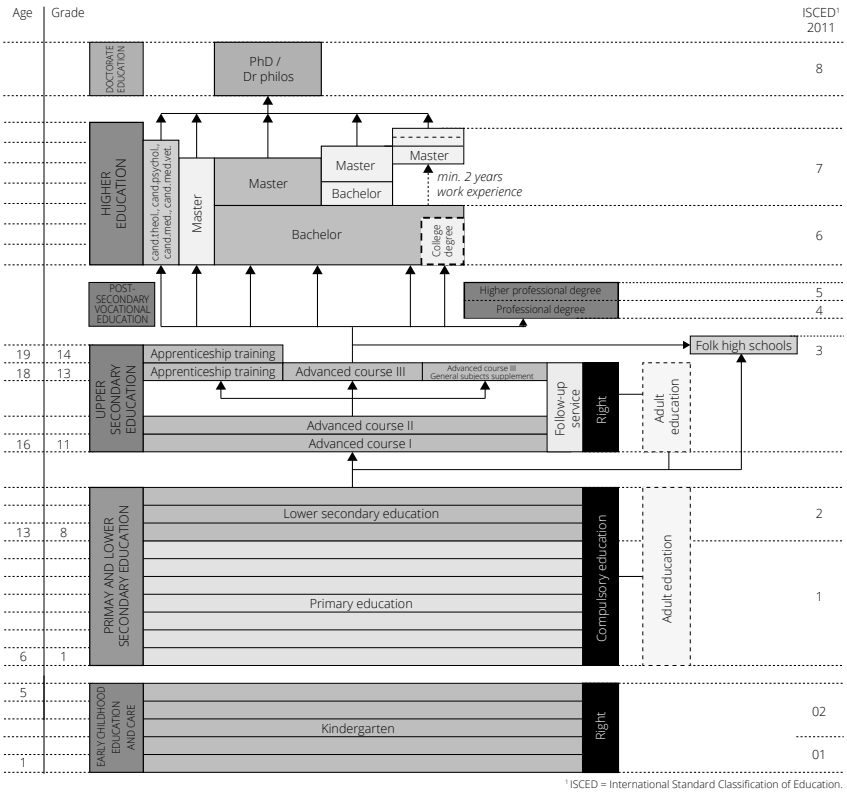
Tonje Haugberg is a senior advisor at the Norwegian Directorate for Education and Training. She holds a degree in Political Science. Tonje Haugberg has been the editor of The Education Mirror since 2014 and currently works with tasks related to the dissemination and communication of statistics and research. She also works with statistics in the field of early education and care (Kindergarten).

# Abstract

The Education Mirror is the Norwegian national report on education, which has been published annually since 2005. The Norwegian Directorate for Education and Training has been tasked with responsibility for the publication by the Ministry of Education. The report presents statistics and analyses of kindergartens and primary and secondary education in Norway and provides an annual update of figures and research on key issues surrounding these educational institutions. Facts, learning outcomes and pupils' well-being are the main topics. The selection of themes and material is based on a combination of available statistics and research, political interest and themes which are considered important for high-quality kindergartens and schools. The statistics have been sourced primarily from statistics collected and analysed by the directorate in respect of pupil numbers, grades, national test results, special needs education, absence, completion rates and more. The report is intended to contribute to a knowledge-based evaluation of the challenges in Norwegian kindergartens and primary and secondary education and to supply the central educational authorities with a knowledge base for policy development and the prioritisation of measures. The publication is targeted first and foremost at national and local education authorities and policy-makers, but it also targets other segments, such as school leaders, organisations and universities, as well as the media and the general public. As The Education Mirror aims to be available and accessible to the broader public, this entails an emphasis on using clear language.

# Education system




[1] ISCED = International Standard Classification of Education.

# Description of the report

**Institutional Details**

The Ministry of Education and Research has overall responsibility for quality assurance in primary, secondary and higher education in Norway. Its goals, purposes and responsibilities are regulated by the Education Act, the Independent Schools Act and associated regulations, including the national curriculum for primary and secondary education: the Knowledge Promotion (renewed in 2020).

The Norwegian Directorate for Education and Training is the executive agency for the Ministry of Education and Research and was established in 2004. The directorate ensures that Norwegian education policy is implemented and upholds the rights of children at kindergarten and of school pupils and apprentices to equality in care and education. The directorate is also responsible for initiating research, collecting statistics and disseminating a relevant knowledge base to different target groups. The Education Mirror plays an important role in this regard.

**Background**

The Education Mirror was first commissioned by the Ministry of Education and Research in 2004 and 2005, and it was first published in 2005. The goal of this commission was to develop a yearly evaluation of the condition of primary and secondary education for children, youth and adults. The evaluation was to be based on the national quality assessment system. The Education Mirror presents statistics and analyses of kindergartens and primary and secondary education in Norway. Facts, learning outcomes and pupils' wellbeing are the main topics. It provides an annual update of figures and research on key issues surrounding these educational institutions.

The publication covers the levels for which the Norwegian Directorate for Education and Training is responsible: kindergarten (as of the 2014 edition) and primary and secondary education, as well as secondary education for adults. A separate quality report, of which the ministry is in charge, covers higher education. Higher education is a more autonomous and diverse sector, and there is little tradition of carrying out analysis and creating reports that look at these sectors in relation to one another.

Apart from the publication's original assignment by the Ministry of Education and Research and its continued inclusion of the publication in

its annual allocation letter, there is no legal foundation for the publication of The Education Mirror.

**Periodicity**

The Education Mirror is published annually, as specified when first assigned by the Ministry of Education and Research in 2004. The Education Mirror has traditionally been important for work on the national budget, which requires an annual report. Correspondingly, the municipalities, as school owners, are required by law to produce an annual quality report on the state of the education and training sector in the municipality. The report is intended to cover completion rates, student results and the learning environment, and it is meant to underpin decision-making on goals and further development. The quality report is part of the municipality's budget and reporting work in the same way as The Education Mirror.

Furthermore, while most of the statistics published by the directorate are annual in nature, they are published at different times during the year. Publishing The Education Mirror yearly allows it to include statistics published throughout the year.

**Target groups**

Defining the target groups for The Education Mirror can be challenging. When it was first created, its primary target group was the national education authorities, with the Ministry of Education and Research being by far the most important. Today, the target group is bigger and can be broken down into primary and secondary target groups: the national and local education authorities and school owners are the primary target groups, while the secondary target groups are special interest organisations, unions, universities, university colleges and the media, as well as anyone else – for instance school leaders, teachers and pupils – who may be interested in the themes included. Employees in the directorate are also an important target group, something which has perhaps become clearer over the last few years.

As The Education Mirror is intended to be available and accessible to the broad public, this entails an emphasis on using clear language. Text boxes and infographics, as well as more complex diagrams, may also contribute to making the material more accessible for different target groups.

**Organisation of the process**

The Directorate of Education and Training is responsible for all parts of the production and development of the publication. All strategic decisions regarding the publication are brought before the directors' meeting. This includes each year's specific theme and decisions such as making the publication digital only and other important conceptual changes.

The manner of work and organisation of the process has varied, but generally the work is coordinated by an editor and an editorial group. The editorial group is responsible for taking initiative for and following up the further development of the publication. The group is also responsible for ordering and editing texts, as well as ensuring that the publication works as a whole. Obtaining pre-publication feedback on the work within the organisation as well as with readers external to the directorate during the process is also the responsibility of the editorial group. The readers external to the directorate may be researchers or individuals from the Ministry of Education and Research, county authorities, unions or other organisations.

**Goals and function of the report**

The Education Mirror has developed into a useful tool for those working in political development, both nationally and locally, by presenting facts and analyses of the education system. It is also a tool for monitoring whether measures and national efforts are having an effect. The selection of themes and material is based on a combination of available statistics and research, political interest and themes which are considered important for high-quality kindergartens and schools.

Placing Norway in an international context – for instance, by disseminating the results of international surveys or presenting indicators from the OECD publication Education at a Glance[1] – is also an important function.

The report is also meant to be part of the knowledge base for local authorities, although it primarily presents statistics and research on a national level. The report aims to serve as a template for local authorities for using statistics to assess and improve quality – for instance, in their local quality report. The Education Mirror also serves as an entrance portal into the various statistical tools and portals that allow the user to compare figures at the local level or to compare local and national figures.

The report as a whole is intended to contribute to a knowledge-based evaluation of the challenges in Norwegian kindergartens, education and training and to supply the central educational authorities with a basis for policy development and prioritisation of measures.

**Data sources and statistics**

The statistics have been sourced primarily from statistics collected and analysed by the directorate. These include pupil numbers, kindergarten facts, grades, national test results, special needs education, absence statistics, completion rates and more. The directorate conducts analysis combining different kinds of data; for instance, data may be considered on the correlation between grades and completion or between absence and grades. In addition to this, statistics including social background variables are ordered from Statistics Norway, the national statistical institute of Norway. Other relevant statistics which are not specifically adapted are also collected from Statistics Norway.

With regard to research, practice has varied through the years. The research used is primarily that commissioned and published by the directorate. In some cases, however, this research is supplemented with research commissioned by others, with the assurance that the research is of adequate quality and that in the main the findings are supported by multiple research projects. Isolated studies are used to a lesser degree. The directorate's own surveys, particularly the pupil survey, are an important source for the publication. It is compulsory for both private and public schools to carry out the pupil survey in certain grades. It includes an assessment of students' social and emotional well-being at school, with questions such as 'Do you enjoy school?' and 'Are you interested in learning at school?'.

The Education Mirror also covers international surveys where these are relevant, particularly PISA, TIMMS and PIRLS these then represent an important part of both the learning outcome chapter and the school environment and well-being chapters. Some years these international surveys are the basis of the special focus chapter.

Normally, inspection reports and their summaries are not used in The Education Mirror as a source of general knowledge about the state of the education system. One reason for this is that the schools and municipalities that are selected for inspection is governed by risk. Thus, the municipalities and schools selected are those which the authorities deem most likely

to be in breach of the regulations. Therefore, it is challenging to use these reports to say something about the quality of the educational institutions in general. Nevertheless, work is underway to improve the systemisation of the knowledge from these reports so that they can better be used as a basis for knowledge.

A lack of data or information is dealt with in different ways. In many cases we use the available sources. For example, in some areas we may have some statistics but little research to shed light on the figures, while in other areas the opposite may be the case. Occasionally, we create a text box with an example or a case to illustrate a theme where we lack statistics and/or research. One such example from the 2019 report presents a municipality which has put an extra effort into recruiting children with an immigrant background to the kindergartens. Often, we indicate the incompleteness of the knowledge base in these fields. Research projects and new data collections are regularly launched, but The Education Mirror is rarely the direct reason for this. The main reason for this is probably the time frame; there is not enough time to produce research of satisfactory quality.

**Structure of the report and topics covered**

The thematic structure of The Education Mirror generally reflects the organisation of the School Portal and the template of the local quality reports of the municipalities, but there has been some variation over the years.

There has been discussion as to whether the publication should be organised according to theme rather than educational level, for instance, where one chapter deals with facts, another on economy and so on, rather than diving into themes by educational level. However, various surveys and qualitative interviews show that many readers prefer for the material to be organised by educational level, and often different regional authorities and departments work with the different educational levels. At present, the structure is somewhat a hybrid of theme and educational level.

In the last two years the fact-based chapters, which contain pupil numbers, school size and teacher-to-pupil ratios, have been split so that there is one chapter for compulsory education (primary and lower secondary school) and one for upper secondary school and vocational education. Learning results have also been included in these chapters. This has resulted in the following chapter structure for the 2019 edition:

Kindergartens

Compulsory education – facts and learning outcomes

Upper secondary education and training – facts and learning outcomes

Cost of kindergarten provision and primary and secondary education

School environment and well-being

Special educational support and special needs education

Completion in upper secondary education

The kindergarten chapter covers mainly facts but also qualitative research on kindergarten quality. For the kindergarten level, there are few data sources addressing topics such as well-being and learning environment. Over the last few years, however, the parent survey has been an important source of information about kindergartens and is used as a source in the kindergarten chapter. Representative surveys among employees, including both surveys initiated by the directorate and international surveys such as TALIS, are also covered depending on when they were published.

**Dissemination and evaluation**

Since 2017, The Education Mirror has been published in electronic format only. The launch event for the publication's release has varied. Some years a seminar with guest lecturers and external guests has been held. In 2018, we had an in-depth analysis of youth who struggle to get an apprenticeship and presented the main findings at a large national vocational education conference. Since 2017, we have also made an infographic film that summarises the main findings of The Education Mirror. In 2018, this film was supplemented by a short film focusing on the selected theme for that year – youth who struggle to get an apprenticeship. The use of press releases has depended on whether the report contains new and/or unpublished facts and findings or whether the content consists mostly of previously published material. Over the last few years, the Ministry of Education and Research has issued press releases based on selected findings, such as in relation to immigrants struggling to get an apprenticeship.

The Education Mirror does not directly follow up on political measures, but it may form part of the knowledge basis that triggers political efforts. The strength of the publication is that different elements of the sector's condition and development are presented in context.

**Future developments**

The Education Mirror is continually evolving, and we are seeking a form for it which works well with the other analyses, research reports and statistics published by the directorate. User surveys indicate that interest in new statistics is at its greatest upon the publication of new figures. Consequently, the short summaries published with a new reference year for the statistics is read more than the more elaborate analysis is of the same subject in The Education Mirror.

In recent years we have tested different strategies. In 2018, the publication was adjusted in so far as the fact summary section was shortened considerably, with links to relevant statistics and analysis being supplied instead. At the same time, the chapter on the selected theme was expanded, allowing for more in-depth analysis. In connection with this, the directorate was able to have qualitative interviews with youth who were searching for an apprenticeship and about the support system (advisers, teachers, etc.) around them. The survey was then used to supplement the statistics and research in a positive way. We also received very positive feedback from the sector on the way we conducted the qualitative fieldwork and showed interest in the people behind the figures.

The following are central to planning the further development of The Education Mirror:

To what degree should the publication trigger and present new findings and analysis?

Is the publication primarily to be an entrance portal to statistics and research, or should it be a full summary?

How normative should the publication be? Should it serve as a neutral basis for knowledge from which politicians and others can draw their own conclusions, or should it offer a critical look at the sector and its achievements?

Should the publication lean more heavily on research carried out specifically for the publication?

# Extract of the report

**The Norwegian Education Mirror in 2019**

In 2019, The Norwegian Education Mirror[2] chose integration and minority-related issues as its main topic and included this theme within the existing chapter structure where relevant. We have therefore selected examples of this special content in addition to some of the more standard elements. See above for the compelte content and structure of the report.

**Number and types of kindergartens**

Kindergarten enrolment has increased considerably recently. Nine out of ten children in Norway now attend kindergarten. Although kindergarten is not compulsory, it is seen as part of the Norwegian education system. Kindergarten is an important arena for children's all-round development through care, play and learning.

There are 5,788 kindergartens in Norway. Among these, 498 are family kindergartens and 117 are open kindergartens. 47% of kindergartens are municipal kindergartens, while 53% are privately owned. 50% of children attend municipal kindergartens. Local authorities cover more than 80% of the cost of running both municipal and private kindergartens. Around 15% of the cost is met by the parents, while government funding earmarked for this purpose and other grants from local authorities and kindergarten owners make up only a small part of kindergarten funding.

*Sources of kindergarten statistics*

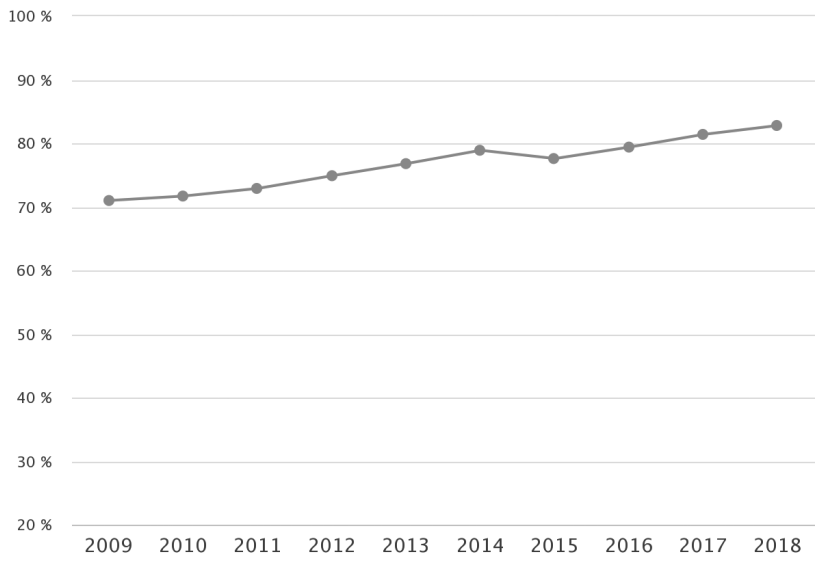
All kindergartens submit an annual electronic report via BASIL, the kindergarten statistics reporting platform. The statistics include every entity in the National Kindergarten Register which, according to its industrial classification, operates a kindergarten and has registered to care for children. Kindergartens use BASIL to report on the number of children, the number of staff, staff qualifications, minority language children and children receiving special educational support. Statistics Norway links the data from BASIL to population figures, partly in order to calculate enrolment rates (the proportion of children from various groups enrolled in kindergarten).

**More minority language children attend kindergarten**

There were 50,900 minority language children enrolled in kindergarten in 2018, an increase of almost 10,000 on five years ago. There has been a steady increase in minority language children attending kindergarten in all age groups (Figure 1). The increase is primarily due to a growing immigrant population, but there has also been an increase in the overall enrolment rate amongst minority language children.

83% of minority language children were enrolled in kindergarten in 2018 (Statistics Norway), an increase of four percentage points on 2014. The greatest disparity between minority language children and other children can be seen amongst one-year-olds. The gap has been decreasing gradually since 2006. Two in ten minority language children who attend kindergarten receive accelerated Norwegian language tuition, which requires additional staff resources.

*Figure 1: Percentage of minority children enrolled in kindergarten*




*Source: Norwegian Directorate for Education and Training/Statistics*

**Discount schemes are working**

The purpose of the national discount schemes is to boost enrolment and to improve the circumstances of financially challenged families. A total of 33,459 low-income households received a reduction in parent contributions in 2018. A total of 41,900 children have benefited from reduced kindergarten fees and 26,000 children from free core time due to low income.

Local authorities spent more than 644 million Norwegian Krone on reducing parent contributions due to low household income in 2018. This is 146 million Norwegian Krone more than in 2017. The national discount scheme for reduced parent contributions has helped increase kindergarten enrolment amongst the households in question by 1.2%. The discount scheme has also cut the cost of a full-time kindergarten place for the households in question and has consequently helped reduce poverty (Østbakken, 2019).

**Compulsory education**

Compulsory education in Norway is for ten years, and each year over 60,000 children start school. There is a tendency towards fewer and larger schools, although due to demographic factors, there is still a large number of small schools. As a result of the teacher-to-child ratio and increased funding, the number of children per teacher has fallen in recent years, especially in the lower year groups.

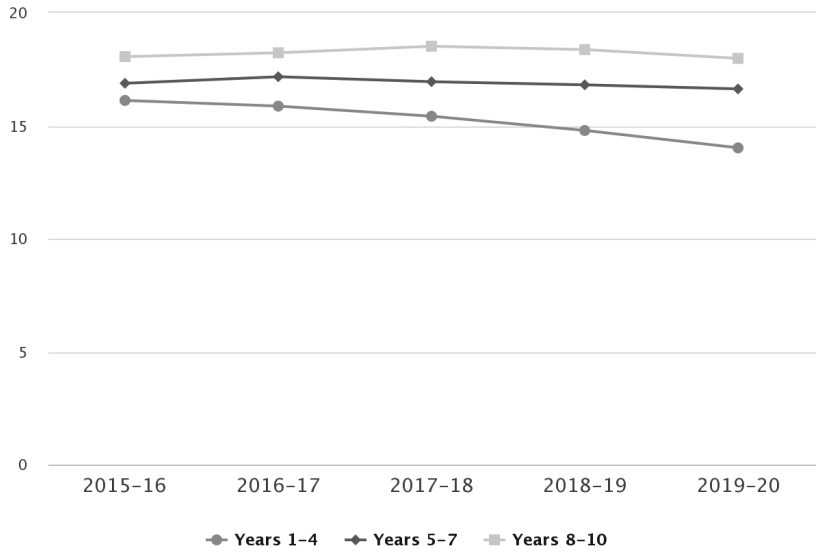
18% of pupils in compulsory education have an immigrant background, a number more than double the figure in 2004. Pupils from immigrant backgrounds generally do well in the Norwegian education system, although they receive slightly lower grades than other pupils. Many pupils who arrive in Norway near the end of compulsory education are not awarded an average point score when they complete their lower secondary schooling.

**New regulations and earmarked funding have increased teacher density**

Almost 70,000 teachers are currently working in Norway. They are teaching 636,250 primary and lower secondary pupils. In the autumn of 2019, there were more than 40,300 full-time employees (FTEs) dedicated to mainstream teaching in public schools. Since 2014, the number of FTEs allocated to mainstream teaching has increased by 3,175 as a result of funding being earmarked

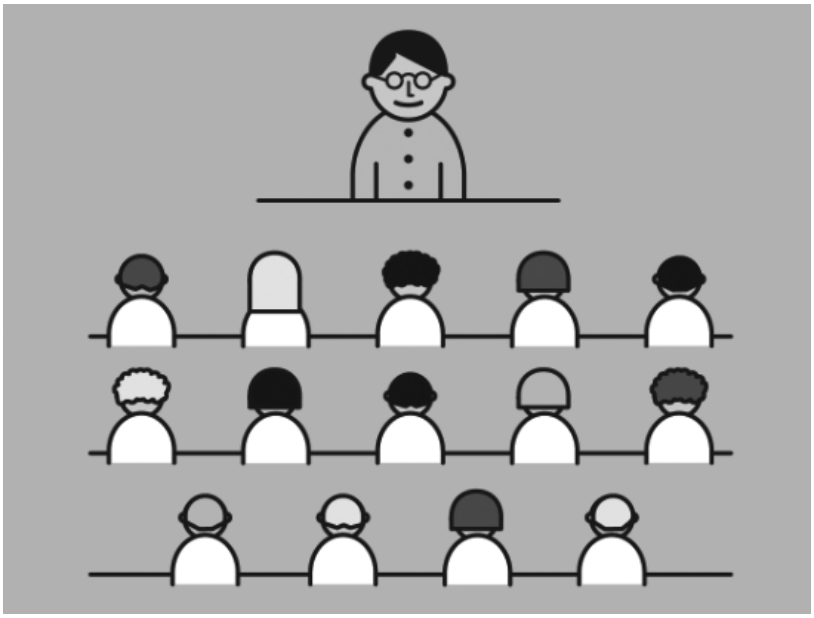
for improving teacher density over the past five years. This funding has resulted in an increase in teacher density, and there are now 15.9 pupils per teacher in years 1 to 10 overall, which is a clear improvement as compared with the previous ten years (Figure 2). The improvement is particularly evident in years 1 to 4, where the pupil-to-teacher ratio fell from 16.2 to 14.0 between 2014 and 2019 (Figure 3).

*Figure 2: Pupils per teacher in mainstream classes by year (public schools)*




*Source: Norwegian Directorate for Education and Training/GSI*

*Figure 3: Pupils-to-teacher-ratio*



In the 2019–20 academic year there are 14.0 pupils per teacher in years 1 to 4.

## Notes

[1] www.oecd.org/education/education-at-a-glance/

[2] www.udir.no/in-english/education-mirror-2019/

## References

Østbakken, K. M. (2019). *Evaluering av moderasjonsordningene for Barnehagen:* Delrapport 2. Rapport 2019:10. Oslo: Instiutt for Samfunnsforskning.

# *The Swiss Education Report – a comprehensive examination of the education system and its context*

## SWITZERLAND AT A GLANCE

- Population: 8.5 million
- GDP per capita: 70,485 USD
- Public expenditure on education: 4.6% of GDP
- Educational attainment (25–64 olds)

  Upper secondary/post-secondary (non-tertiary): 45%

  Tertiary: 44%

The figures refer to the following: population 2018, GDP 2019 current prices and current PPPs, public expenditure 2016, education attainment 2018 (tertiary includes short-cycle, BA, MA, PhD) Education at a glance, OECD (2019).

Switzerland

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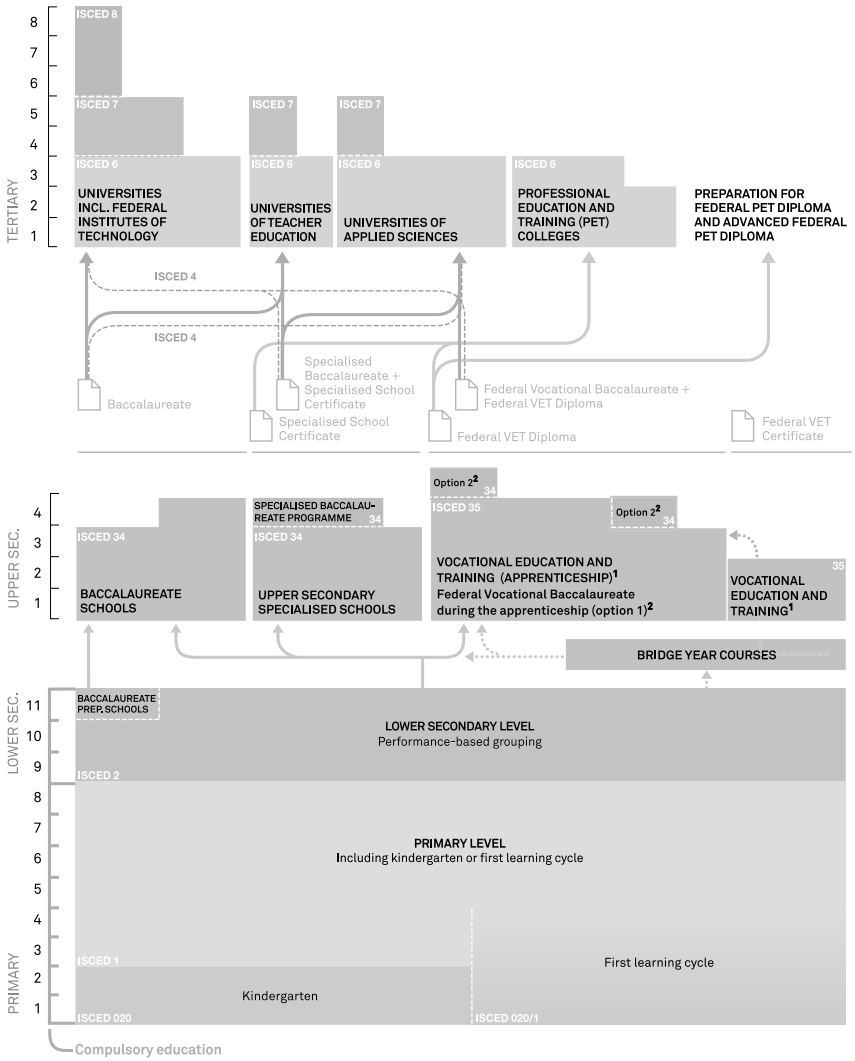
# Abstract

Since the amendment of the Swiss Federal Constitution in 2006, the quality assurance and permeability of the Swiss education system have been enshrined in the Constitution. Consequently, a comprehensive evaluation is published every four years in the form of the Swiss Education Report to monitor the degree to which these goals are actually achieved. The Swiss Education Report contains a comprehensive examination and analysis of the whole education system based on the systematic, scientifically supported and long-term processing of information on the Swiss education system. Each level of education from primary including kindergarten to adult education and each type of education is described in its respective contextual and institutional framework, followed by the evaluation according to the same three criteria: effectiveness, efficiency, equity. Long-term effects of education are presented as well. The first part of this contribution provides an overview of how the Swiss Education Report is anchored in national education policy and shows that the report is part of a dynamic process of system monitoring. It is the starting point and end point of the evaluation of the national education policy objectives, the basis for the implementation of measures in the education system and the basis for the improvement and expansion of the quality of the datasets. In the second part we present, as examples, the findings of the Swiss Education Report 2018 on language teaching and the effect of instruction time as well as on the PISA results as a predictor of success at university.

# Education system




¹ Vocational education and training (apprenticeship): training company + VET school + intercompany courses; full-time school education possible

² Federal Vocational Baccalaureate: combined with an apprenticeship (option 1) or after an apprenticeship (option 2); duration option 2: full-time 1 year, part-time 1.5 – 2 years

# Description of the report

**Introduction**

The Swiss Education Report[1] is part of what is referred to as national education monitoring.[2] The pilot report was published in 2006 and the first official report in 2010. The report is based on the systematic, scientifically supported, and long-term processing of information on the Swiss education system. The report presents relevant contextual information, institutional characteristics of each level of education, and assesses the education system according to the three criteria of effectiveness, efficiency, and equity. It provides the basis for the development of the educational policy objectives of the federal government and the cantons[3], which, according to the Constitution, are jointly responsible for the quality of the education system. The publication of the education report is followed by a comprehensive phase of evaluation, the confirmation of existing policy objectives and the formulation of new objectives. The publication of the Swiss Education Report 2018 marks the second complete cycle in the long-term process of education monitoring.

**Why a national education report?**

With the referendum on the educational articles of the Constitution in 2006, the federal government and the cantons have jointly committed to guaranteeing a high level of quality and permeability in the Swiss education system within the framework of their respective competences. In the performance of this duty, the entire education system in Switzerland is systematically monitored and regularly evaluated. Knowledge is gathered and methodically processed to produce information of relevance for educational policy making at the system level. The education report is a central component of this national education monitoring process in which the federal government and the cantons implement this new constitutional article (Art. 61a). National education monitoring is not concerned with controlling the Swiss education system on the basis of a fixed grid of statistical indicators, but primarily with evaluating the system on the basis of empirically verified knowledge. The Swiss Education Report serves this purpose by processing statistical and administrative information according to various control criteria and interpreting it on the basis of existing research results. Every report contains several hundreds of references to research articles relevant for the interpretation of statistical observations and policy decisions. In other words, educational monitoring is a process aimed at the systematic, scientifically sound and long-term collection, processing and evaluation of information on the Swiss education system and its context, which is why a four-year cycle was established.

Generally speaking, the report has to fulfil two main objectives: first, every four years the report provides a central evidence base for decisions concerning the further development of the entire public Swiss education system at national level. Furthermore, the findings of education monitoring are incorporated into cantonal projects. Second, the education report provides information both on knowledge gaps and on how to improve the situation. Based on the report, the Confederation and the cantons agree on which knowledge gaps should be treated with priority. This is then fed into the four-year plan of the Federal Statistical Office and the research programmes and projects commissioned by the federal and cantonal authorities. In consequence, the report provides a data-supported basis for political decisions the main audience of which are the mandating political authorities at national, cantonal and to some extent also at municipal level. Other target groups include all relevant stakeholders in the system, the media and a wider public.

**What does the national education report cover?**

According to the official mandate, the structure of the report is such that it covers all educational levels from preschool to continuing or adult education. Each level and type of education is described in its relevant contextual conditions and its institutional setting. The main focus lies on the assessment of all levels and types of education according to the same three criteria: effectiveness, which means the degree to which objectives are achieved; efficiency, which refers to the degree to which resources and measures are effective relative to the defined objectives; and equity, which refers to an 'educational and learning environment in which individuals can consider options and make choices throughout their lives based on their abilities and talents, not on the basis of stereotypes, biased expectations or discrimination' (Coradi Vellacott & Wolter, 2005). A structure based on educational levels has the advantage for the readers that they do not have to look for information about an educational level scattered over the whole report, but they get a compact picture of the respective types of education. A possible disadvantage of the structure according to educational levels and types of education is that the information on a specific topic that could be relevant for different educational levels, such as digitalisation, cannot be found in one topical chapter. For this reason, a topic and word index are being considered for the next report, although full text search is possible in the electronic versions of the report. Another aspect addresses the fact that educational effects, which generally do not depend solely on the education of one single specific level or type of education, but on the cumulative education over the entire educational career of a person,

do not easily fit into the structure. To overcome this drawback, a special chapter on the cumulative effects of education is included as a final chapter in every report. This chapter treats all possible monetary and non-monetary effects of education at the micro and the macro level, such as income, health, political participation and other outcomes. To ensure maximum comparability of the reports over time, each edition of the Swiss Education Report is structured in the same way.

**How are the topics selected?**

One of the major challenges when compiling information for a new education report not based on a fixed set of indicators is whether or not to give coverage to aspects that have already been included in earlier reports. Based on a decision of the mandating bodies, the report, for reasons of readability, should not exceed 300 pages. In consequence, new topics which repeatedly emerge and merit coverage must substitute old topics that were covered in earlier reports. For this reason, only those aspects for which the development over time is informative or which have to be monitored on a regular basis, such as e.g. completion rates of post-compulsory education, are monitored on a regular basis. It is also important to highlight that the national educational report fulfils the scopes specified by the mandating authorities. A description of the education system, which is only published every four years, is not and cannot be aimed at providing the detailed basic statistics that are updated monthly by the Federal Statistical Office and other authorities. Similarly, the national education report only covers educational topics if they primarily provide information on the assessment and strategic planning of the education system as a whole. This means, for example, that findings from research about teaching methods or styles can only be of interest for the education report if they are relevant for the governing of the system. Research findings, however, that are primarily intended to support the individual teacher's work, will not be included in the education report.

**Who produces the education report?**

The education report is commissioned by the State Secretariat for Education, Research and Innovation, representing the federal government, and the Swiss Conference of Cantonal Ministers of Education (EDK), which represents all the cantons. A national education monitoring steering group with representatives of the federal government, the cantons, the Federal Statistical Office and other

relevant representatives evaluates the current reports and guides the work of future reports. Since 2006, when the pilot report was written, the Swiss Coordination Centre for Research in Education (SCCRE) has been mandated to write and publish the report.

The report is based on very extensive data material. In addition to scientific research publications on the Swiss education system and documents from the education administration, statistics collected by the Federal Statistical Office are an important data basis. These statistics include surveys and administrative data, like the Swiss household panel, the regular graduate surveys of all Swiss universities, the Swiss labour force survey and other similar surveys that cover Switzerland in a representative manner. The micro data of these surveys is made available to SCCRE researchers and they thus make secondary analyses on specific topics, usually using multivariate statistical methods. The statistical system in Switzerland has recently been modernised and allows individuals to be linked across different statistics and over time using the social security number. This allows researchers to follow individuals throughout their entire educational career and beyond. This, of course, only in compliance with data protection laws and in a completely anonymised form. The modernised statistics have opened up completely new possibilities for analysis, which represent a significant expansion for national educational monitoring. For example, in addition to the knowledge about differences between cantons, these data bases now also provide information on intra-cantonal variance as well as information on educational careers in the Swiss education system, so that diagnosis can be significantly improved.

To draw conclusions about the effectiveness in the sector of compulsory education, educational assessments, such as the PISA study, are most informative. Since 2016, these international assessments have been complemented with national achievement tests. Detailed analyses of this data will be presented for the first time in the next national education report.

All data and analyses presented in the report on the Swiss education system are placed within the context of institutional factors and are also linked to international research findings. However, many education policy challenges cannot be addressed with the data and research at hand, and the report also highlights the gaps in the knowledge as much as the available evidence. Occasionally, cantonal results are shown or international research literature is used as a reference point for causal interpretations if data at the national level is missing.

**How is the report disseminated?**

The Swiss Education Report is published in three national languages and in English. In addition to the online version, the report is printed in an edition of around 3,300 hard copies. Given the size of Switzerland's population, this is a very large number of copies for a non-fiction book. The printed book is still surprisingly often preferred to the electronic versions. According to the feedback we regularly receive, the report serves as a reference study in the various education administration departments and as a basis for dealing with parliamentary affairs. The same is true of organisations that deal with educational issues but are not part of the education system, such as trade unions and employers' associations.

The first presentation of each report takes place internally for the mandating authorities, who can discuss the key findings of the report before publication. This is followed by a national press conference and active media work. The latest education reports were covered by around 40 different and very often lengthy articles in the daily press, radio and television. Specific articles were written by the authors of the report for some 20 specialist journals in the field of education. The authors were invited to about 50 presentations in national parliament, in federal and cantonal ministries as well as parliamentary and extra parliamentary education commissions. Presentations were also given for the teachers unions, the trade unions and employers' organisations – the latter very often in the form of daily or half-daily seminars. Finally, regular presentations were delivered at the annual meetings of the rectors of universities and the rectors of schools of the upper-secondary level. The most recent report (2018) was also communicated via social media using different channels such as Twitter, Facebook and LinkedIn, in order to expand the dissemination of the findings of the report.

**Is the report evaluated?**

After the first, albeit pilot report in 2006, a comprehensive analysis phase was launched. While different, although closely aligned, objectives were pursued, this analysis provided the federal government and the cantons with the information needed to establish a work programme comprising strategic planning objectives and measures to further develop the education system. Based on the knowledge gaps detected in the report, specific research projects were initiated and priorities set in the national four-year plan for educational statistics. Finally, the Swiss report was evaluated internally by stakeholder groups

but also by two expert groups from Germany and Canada which have already had experiences with the national monitoring of education. This last point in particular helped to set the guidelines for the first official report in 2010.

The analyses of the first official report (2010) culminated in a joint education policy statement by the federal authorities and the cantons. The fact that the responsible minister at federal level and the president of the EDK presented the joint education policy objectives was historic by Swiss standards. The common education policy objectives in 2011 represented not only the main result of the first phase of analyses of the Swiss education report 2010, but were also directly incorporated into the Swiss education report 2014. The publication of the 2014 report marked the completion of the first full four-year cycle of the education monitoring process, starting with an evaluation of the state of the education system, the formulation of national policy goals and, finally, the first evaluation and appreciation of these goals in the second report. Each report is followed by the same comprehensive evaluation phase and a reformulation of the joint federal and cantonal education objectives (from 2015 and 2019).

**Future developments**

More than the evaluation of the educational levels according to the criteria already explained is necessary if the quality of the education system is to be continuously improved. It also requires findings on the causal aspects and on appropriate measures needed to improve the education processes and outcomes. The most recent education report, which marks the second completed monitoring cycle, shows that this process is very time consuming. Time is needed in a first evaluation phase of the report and for the formulation of new policy objectives. Further time is needed to define measures and subsequently implement them. After their implementation, it often takes several years before impact can be measured. And if the impact cannot simply be measured with statistical data but needs scientific analyses, further time is needed. This is one of the reasons behind the long cycle of four years for every education report. However, even though it takes time to make all these assessments, we can conclude, after eight years of monitoring, that the changes in the quality of the education system can be observed over time and that the continuous monitoring is bearing fruit. Educational reporting that provides evidence for political intervention in the system to the politically responsible authorities and persons needs long cycles and repetition, i.e. patience, something that often contradicts political time cycles.

# Extract of the report

**Swiss Education Report 2018 – two examples of linking institutional details, statistics and research**

Below, two topics from the Swiss Education Report 2018 have been selected for exemplary presentation.[4] The first part focuses on the learning of foreign languages. In a multilingual country, such as Switzerland, all pupils already learn two foreign languages at primary level. Despite the strongly federal structures in the education system, there is coordination between the cantons and the federal government concerning language teaching. This topic is an example of how statistics, research and administrative data are linked in the education report. The second part provides an insight into findings that look at educational careers across several educational levels as well as looking at the predictive potential of PISA results for educational success at the level of university studies. This extract from the report demonstrates how educational testing combined with longitudinal data on the individual educational progress can produce informative evidence for the steering of the education system.

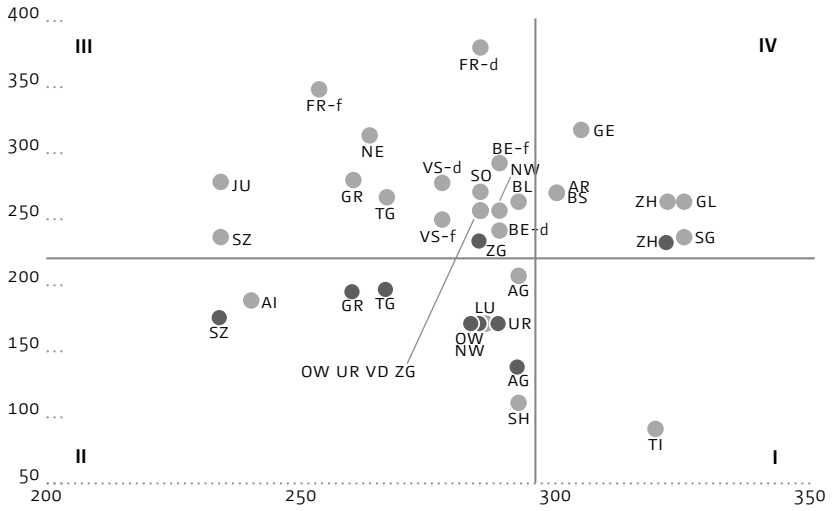
**Foreign language teaching in compulsory school – the more the better?**

The key concepts for teaching languages at compulsory school are established by an agreement between the cantons (so called HarmoS Agreement 2007) and the Federal Act on the National Languages and Understanding between the Linguistic Communities (Languages Act [LangA] of October 2007). Both of these are based on the National Languages Strategy 2004 adopted by the Swiss Conference of Cantonal Ministers of Education (EDK) for coordinated further development of language teaching in Switzerland. The Languages Act stipulates teaching a second national language and English to meet the requirements to promote multilingualism of all learners in compulsory education. This act requires further that students should have achieved comparable skills in both languages by the end of their compulsory education all over Switzerland (EDK, 2011). The HarmoS Agreement obliges in accordance with the language strategy that the first foreign language should start no later than the fifth school year and the second no later than the seventh. More than a decade after the adoption of the languages strategy, 23 of the 26 cantons have implemented the structural specifications. There is an exception for one canton, as it is a trilingual canton.

Is this structural harmonisation between the cantons also reflected in the cantonal instruction time reserved for foreign languages? Despite harmonisation efforts, there are still major differences in instruction time between the

cantons. At the end of primary school, the difference between the cantons in instruction time in the first foreign language is around 100 hours (in some cantons it is English, in other cantons it is a second national language). Looking at the number of hours for the lower secondary level, the range between the cantons is over 200 hours (Figure 1). There is some compensation between primary and lower secondary education. This can be seen, for example, for cantons that invest less than average time at primary level and more than average time at lower secondary level (upper left-hand corner in Figure 1, marked with III). Overall, these differences imply that certain pupils attend around 250 hours fewer lessons in their first foreign language than pupils in the cantons that are at the top in terms of instruction time.

*Figure 1: Teaching time in the first foreign language at primary level and at lower secondary level, by canton*




*Source: EDK-IDES; calculations: SCCRE*

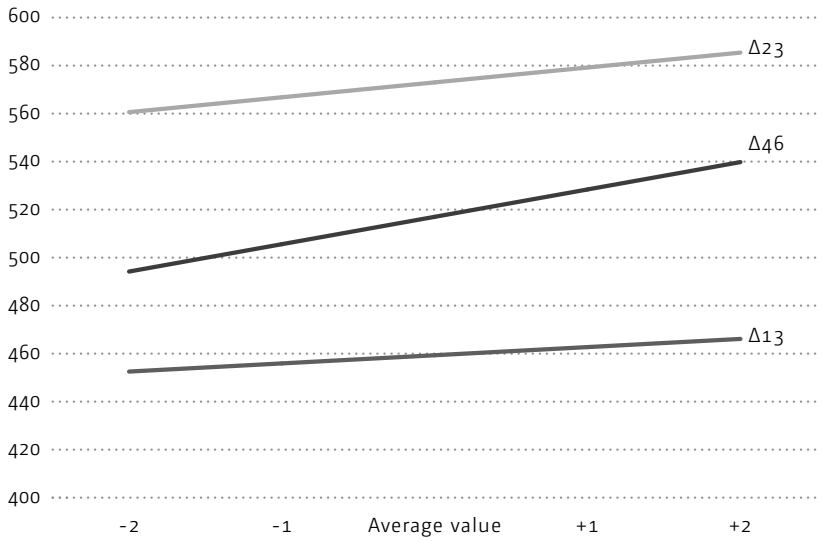
Remarks: The instruction time is calculated by multiplying the number of lessons by the duration of one lesson, the number of weeks and the number of years with teaching in the first foreign language (L2), shown in hours. The lines represent the Swiss average for primary and lower-secondary level. For lower-secondary level, only compulsory and compulsory elective lessons and a cantonal average for the requirements profiles (weighted according to the distribution of pupils across the different profiles) are taken into account. A minimum scenario is shown for some cantons (dark dots). This lower total arises when the choice between the two foreign languages is not made in favour of L2.

Considering the high variations in instruction time between the cantons, the question arises whether students who attend more lessons also achieve better results when leaving compulsory school. It is also questionable whether students within a canton achieve comparable skills in the two foreign languages, as stipulated in the Language Act – given the fact that the later introduction of the second foreign language is not compensated by a higher number of lessons compared to the number of lessons in the first foreign language. The instruction time in the two foreign languages within a canton also varies considerably. The representative cantonal and regional evaluations show that more foreign language teaching – specifically a higher number of school years with foreign language teaching – correlates with significantly higher attainment. However, these studies do not allow any conclusions on a causal relationship between the time spent for foreign language learning and the proficiency of students (Bayer & Moser, 2016; Peyer et al., 2016; Steidinger & Marques Pereira, 2016).

A causal assessment of the relationship between the number of hours of instruction and the proficiency in foreign languages for the whole of Switzerland cannot be presented for the time being. Although national competence assessments have been carried out in Switzerland for a few years, the results were not yet available at the time of publication of the education report 2018. In the meantime, results are available for the school year at the end of primary school for students' language skills. Data on the competence levels at the end of compulsory education are still lacking. In any case, it is very complex to assess the additional value of more instruction time, since cantons or schools with more or less instruction time may also differ in student, teacher and school characteristics, categories not observable by the researchers. Internationally, there are various analyses that identify a causal link between additional instruction time and attainment (Huebener et al., 2017; Lavy, 2015). On the basis of additional cantonal random samples from the PISA 2009 study, a moderate causal effect of instruction time on attainment (independent of the school subject) was observed for Switzerland (Figure 2): with regard to the impact of additional instruction time, it can be observed that a deviation from the average instruction time per week by one hour changes attainment by 35 to 50% of the effect of an average hour. The analysis also demonstrates that more instruction time does not have the same effect on students' attainment in every requirement profile at lower secondary level (depending on the canton, lower secondary level comprises two to four requirement profiles, ranging from basic to high requirements). Compared with the lowest requirement profile, an additional lesson in the highest requirement profile has twice the effect. It is not possible to conclusively determine where the

varying effectiveness of the instruction time comes from. Nevertheless, it is clear that more instruction time does not contribute to making educational outcomes more homogeneous, but on the contrary makes educational attainment even more heterogeneous. Therefore, it can be assumed for Switzerland that additional instruction time is used consistently and practically irrespective of the different learning needs of the students. As a result, the attainment gap tends to widen rather than close with additional instruction time. Students with learning difficulties would need more lessons to prevent this. The fact is that in some cantons of Switzerland these students are released from foreign language classes.

*Figure 2: Impact of teaching time on school attainment by requirement profile*




*Source: Cattaneo, Oggenfuss & Wolter, 2017; SCCRE, 2018*

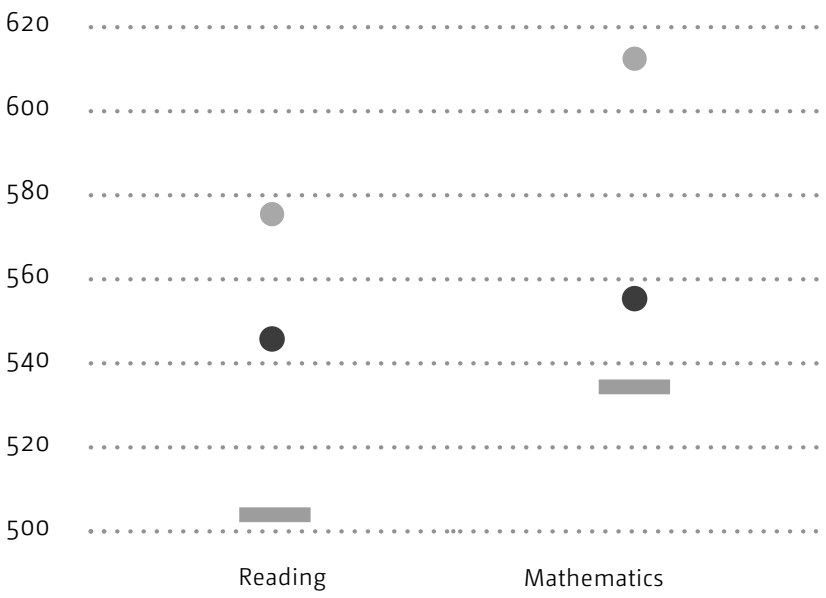
**Prediction of educational success at universities**

In addition to the evaluation of the different educational levels, an important element of the educational report is to examine the processes at the

transitions between the educational levels as well. For the third publication of the education report in 2018, the modernised education statistics were available for the first time. It was finally possible to compile individual data using the insured person number and to combine various previously separate education statistics. At the time of publication, however, only observations from a relatively short period of time were available, which is why, as often in previous reports, it was necessary to refer to results of specific research projects on educational careers.

In Switzerland, 20% of university students at the Bachelor's level change the subject of study during their studies and 25% drop out of university before getting a degree. Of these, however, some 40% change to a university of applied sciences or to a university of teacher education. At Master's level, the success rate at universities is 94%. It is known from literature that factors such as previous school education, previous educational attainment or willingness to learn have a significant effect on the success at university (Larsen et al., 2013). A research project at the University of Bern also shows that students with a good school leaving certificate from the Gymnasium (grammar school equivalent) are more likely to remain in their (first-choice) subject and are less likely to drop out than students with a poorer school leaving certificate. The strong correlation is remarkable in view of the non-standardised leaving certificate at Swiss Gymnasiums and the free choice of study at Swiss universities. The extent to which the influence of the grade at Gymnasium can be attributed to different cognitive abilities and subject-related competences or to non-cognitive competences such as learning techniques or the willingness to learn cannot be answered with the data currently available. Further analyses of a study representative for Switzerland support the assumption that cognitive skills at the end of compulsory education are predictive of success at university (Figure 3). For this research project, the PISA cohort from the year 2000 was repeatedly asked about their educational situation over the following 15 years. The analyses show that persons who dropped out of university had already had lower reading and mathematical PISA results at the end of compulsory education than those who had successfully completed their studies. The line at the bottom of Figure 3 represents the average performance of the entire national sample. The dots represent the average PISA performance of unsuccessful (dark dots) or successful (light dots) university students. Whether these differences can be explained by other individual characteristics (such as the choice of subjects) or whether they exist independently of other factors is not revealed by this study and requires further analysis.

*Figure 3: PISA results of successful and unsuccessful university students (median values)*




*Source: Research project at the University of Bern called TREE using PISA 2000; calculations: SCCRE*

In response to the number of dropouts and changes of subject at Swiss universities, the federal government and the cantons formulated the objective of reducing the number of dropouts through appropriate measures in their declaration on common educational goals in 2015. The key question is what can be done to ensure that as many students as possible obtain a degree without lowering quality standards. At the current time, this question cannot yet be answered conclusively.

## Notes

[1] Parts of this contribution were published in Oggenfuss (2018) and SCCRE (2018), see www.skbf-csre.ch/education-report/education-report

[2] Homepage on the education monitoring: www.sbfi.admin.ch/sbfi/de/home/bildung/bildungsraum-schweiz/bildungszusammenarbeit-bund-kantone/bildungsmonitoring-schweiz.html

[3] The Swiss cantons are comparable with German *Länder* (states) or the Canadian provinces in terms of their degree of autonomy in educational policy.

[4] Parts of this section were published in SCCRE (2018).

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# *Evidence-Based Education Policy – OECD's role in supporting countries*

OECD

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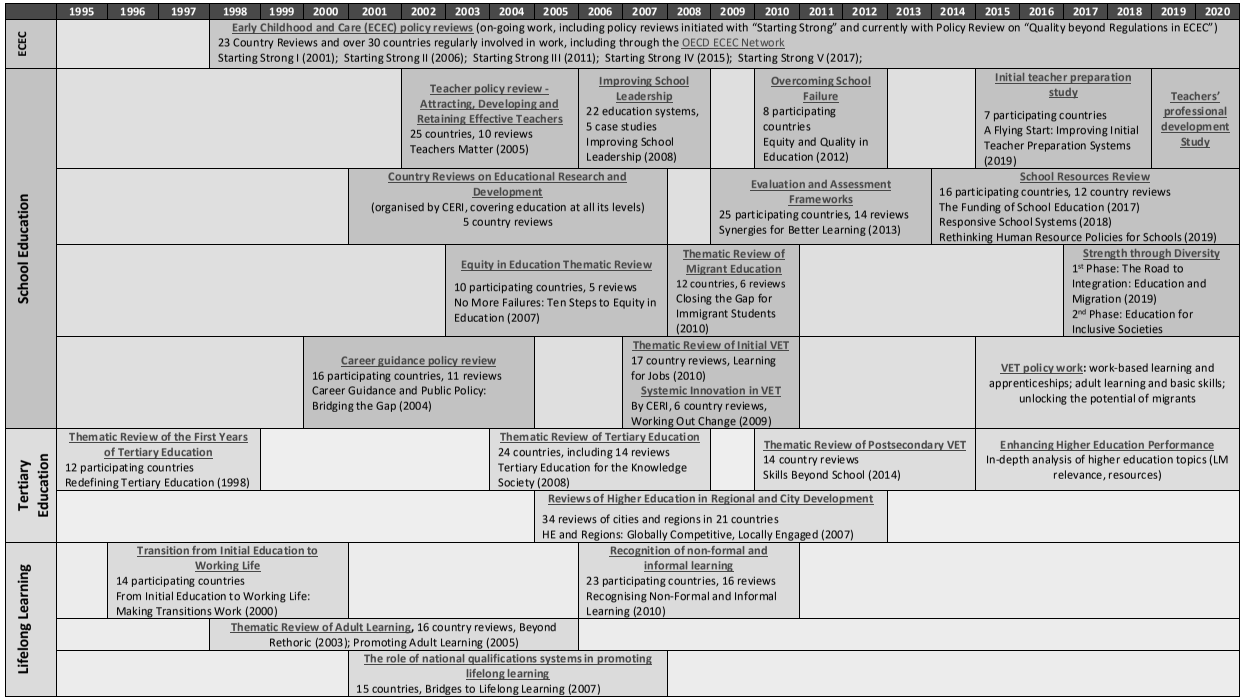
# Abstract

This contribution presents the variety of approaches used by the OECD in the last few decades to support countries in developing and implementating evidence-based policies in education. OECD's work on education policy helps countries close the gap between educational aspirations and performance by providing advice that spans the policy process, including diagnosis, review, dialogue and implementation. Education Policy Reviews, conducted by the OECD for more than five decades, provide independent, external contextualised analysis and advice carefully grounded in evidence. They include both country-specific and cross-country comparative reviews to build deep, cumulative and shared learning on a key dimension of education policy. However, OECD education policy work does not necessarily engage in policy recommendations. It can, instead, focus on policy diagnosis – i.e. understanding how one's education system is performing, where its strengths and challenges are, and what options for improvement exist. OECD's work on education policy also promotes policy dialogue in countries through national policy dialogues that are grounded in its own studies and custom peer-learning activities that build on global expert networks. Finally, successful reforms require effective policy implementation, which translates intentions into effects in the world of educational practice. This has recently led to a greater focus on education policy implementation in OECD's work on education with implementation supports and strategic advice offered to countries.

# Thematic review



# Evidence-based education policy: OECD's role in supporting countries

## Introduction

The OECD has a long tradition of policy-oriented work on education in view of supporting countries in developing and implementing evidence-based education policies. The OECD provides a setting where governments can compare policy experiences, seek answers to common problems and identify and share good practices. OECD's work on education policy synthesises research-based evidence and disseminates this knowledge among countries; identifies innovative and successful policy initiatives in countries; facilitates exchanges of lessons among countries; supports national dialogue on education policy; and provides context-specific policy recommendations for policy makers to consider.

OECD's work on education policy helps countries close the gap between educational aspirations and performance by providing advice that spans the policy process, including diagnosis, review, dialogue and implementation. This contribution presents the range of products and services the OECD offers to support education policy in countries, and elaborates on their background, rationale and methodological approach. Following a brief historical background, it is organised according to the typology of products and services proposed by the brochure OECD Work on Education and Skills: Policy Products and Services for Countries.[1] The contribution starts by elaborating on the long tradition of Education Policy Country Reviews and then goes onto a description of Diagnostic Policy Studies. This is followed by the presentation of Policy Dialogues and Peer Learning Activities; which then leads to the review of approaches to Policy Implementation Support and Strategic Advice. The contribution concludes with the approach to mobilise OECD knowledge on education policy.

## Background

The OECD has a wide and sustained experience analysing and reviewing education policy for more than six decades. Initially operating in the 1960's under the Committee for Scientific and Technical Personnel, following practices in the field of economic policy, annual education reviews were initiated as from 1958/59 with a focus on the general situation of scientific education and technical training (Papadopoulos, 1994). As put by George Papadopoulos (1994), 'Although at this early stage these reviews were fairly slender affairs, mostly of a descriptive rather than analytical nature, they soon showed their value in providing a useful channel for wide exchange of experience, and in

stimulating, and sometimes guiding, national action'. These reviews received a further impetus with the setting up, in 1962, of the Educational Investment and Planning Programme that ran into the early seventies. The programme was designed to provide a framework of mutual assistance among the member countries, working closely with the Secretariat, in their efforts to plan for educational development (Papadopoulos, 1994). This programme provided much of the analytical work that fed education policy discussions as the OECD Education Committee was created in 1970 (renamed as Education Policy Committee in 2007) and led to the creation of a whole round of reviews under the series National Reviews of Education Policy (Papadopoulos, 1994). To complement the policy work in education, the Centre for Educational Research and Innovation (CERI) was established in 1968 to focus on research and innovation.

As independent work carefully grounded in evidence, OECD country-specific policy advice has benefited from a growing knowledge base, not only in terms of the evolving education policy literature but also through the development of international data. The International Indicators of Education Systems (INES) network was created in 1988, leading to the first edition of Education at a Glance in 1992. The Programme for International Student Assessment (PISA) provided the first large database on education performance in 2001 and the Teaching and Learning International Survey (TALIS) released its first data on teachers in 2009. This evidence allows countries to learn more about their own education policies by benchmarking their experience to that of other countries.

Among its main characteristics, the OECD work on education policy engages a global network of collaborators and advisors, including leading researchers and experienced practitioners. It also involves close collaboration with governments, whose policy experience can be engaged and mobilised in peer reviews. The work also benefits from integrated expertise that encompasses education research, policy and practice from early childhood care though adult education, and which is backed by expert statisticians, economists, and specialists from closely related fields, such as science, technology, and innovation; and labour and employment policy.

**The long tradition: Education Policy Country Reviews**

Education Policy Country Reviews have a long tradition in OECD's work on education and are among the most well established products proposed by the Directorate for Education and Skills to support countries in education policy development and implementation. These reviews, conducted by the OECD for

more than five decades, provide independent, external analysis and advice carefully grounded in evidence. Education Policy Country Reviews provide countries with opportunities to learn from international evidence with analysis that fits their national context. Two types of Education Policy Country Reviews are available.

*National Reviews of Education Policy*

A National Review of Education Policy is a study undertaken at the request of a single country (or a sub-national education jurisdiction) to provide custom, in-depth analysis and policy advice. A national review can examine a nation's entire education system, one level of education (e.g. school education; higher education) or a policy area or educational process, such as quality assurance in higher education, or integrity in education. A national review provides a flexible mechanism to respond to one-off demands by countries, often reflecting pressing priorities, in those policy areas not covered by projects in the existing Programme of Work. They also enable countries to continue to draw on and extend OECD expertise in areas addressed by comparative reviews (see below) that have been discontinued as distinct outputs, such as the series on educational evaluation and assessment. As such, national reviews are offered on an ad-hoc basis, mobilising the policy knowledge and data of the Directorate for Education and Skills and applying it to the particular context faced by the concerned country. National reviews can also be conducted in non-member countries allowing mutual learning and knowledge sharing between member and non-member countries; and enhancing the influence and relevance of the OECD's work on education. In particular, Accession Reviews of Education Policy are organised as part of processes for countries to access OECD membership.

National Reviews of Education Policy use a mixed-methods approach, combining analysis of national and international data resources, analysis of national policy documents and research, and intensive field-based interviewing by OECD-led review teams. Reviews begin with country self-assessments (e.g. in country background reports), as well as OECD desk-based research that use OECD data resources, such as PISA and the programme for the International Assessment of Adult Competencies (PIAAC), prior OECD studies, and scientific publications. Planning and fact-finding country visits follow, undertaken by a review team consisting of OECD analysts and leading international experts. A detailed national review is drafted, reviewed and published, and typically accompanied by a major launch event in the host country. Country authorities

comment on drafts of the review report and workshops with relevant stakeholders may be organised to discuss an advanced draft of the review report.

The scope and focus of each national review is determined by the concerned country. By providing an external perspective, National Reviews of Education Policy are intended to contribute to national discussions, as well as inform other countries about effective education policies. They help strengthen countries' capacity in evidence-based policy design and development. In addition, national reviews can help build consensus about effective reform mechanisms and good practices among key education stakeholders, informing on-going and future reforms. National Reviews of Education Policy also permit the OECD Secretariat to enrich its knowledge base and expertise on policy development and impact of policies.

The inaugural National Reviews of Education Policy were published in 1969, reviewing the education systems of Ireland, Italy and Sweden. Since then 13 reviews were organised in the 1970's, 12 reviews in the 1980's, 20 reviews in the 1990's, 23 reviews in the 2000's and 22 reviews in the 2010's as part of the publication series 'Reviews of National Policies for Education'. The large majority of these reviews examine the entire education system or either school education or tertiary education. However, in some cases, they can be more specific such as with the Review of Basic Education in Turkey (2007), the Review of Lower Secondary Education in Norway (2011), the Review of Polytechnic Education in Finland (2003) and the Review of Lifelong Learning in Norway (2002). Reviews have also been conducted in non-member countries, starting with Yugoslavia in 1981, and have since included countries from a wide variety of regions in the world (e.g. Romania, Russian Federation; Egypt, South Africa; Indonesia, Kazakhstan; Brazil, Dominican Republic). A number of accession reviews have also been organised, more recently in Costa Rica (2017) and Lithuania (2017). Some reviews were also jointly conducted with another international organisation such as the 2012 Review of Tertiary Education in Colombia with the World Bank and the 2016 Review of Education in Thailand with UNESCO. Also, reviews of sub-national education jurisdictions have been delivered such as the Review of Education of Scotland (2007) and the Review of the State of Santa Catarina in Brazil (2010).

*Comparative Reviews of Education Policy*

Comparative Reviews of Education Policy (or Thematic Reviews of Education Policy) offer countries an opportunity to build deep, cumulative and shared

learning on a key dimension of education policy – such as early childhood education and care, teacher policy or equity in education. The OECD does this working with a group of participating countries on a project that adopts a common conceptual framework and methodology. In contrast to national reviews, countries participating in a comparative review are part of a multi-year project with many participating countries. They give advice to the project through a standing advisory body, and submit additional data for the wider comparative review. They receive a report on the theme under study that focuses on their country (on a volunteer basis), as well as a final comparative report synthesising results across all countries participating in the project. Comparative reviews' evidence base is extensive, including relevant literature reviews, data analyses, examination of country-specific policies, contribution of experienced researchers and policy-makers, field visits to institutions (schools or tertiary education institutions) and meetings with relevant stakeholders. Typically, a comparative review with about 25 participating countries and 15 country reviews involves about 30 external experts, the visit to about 100 institutions and collecting the views and perspectives of about 3,000 stakeholder representatives.

Single Education Policy Country Reviews are organised, as an option, as part of Comparative Reviews of Education Policy with a focus on the particular theme analysed by the comparative review. Within the thematic policy area addressed, volunteer review countries can expect to benefit by: gaining an in-depth understanding of the strengths and weaknesses of their education policies; receiving evidence-based advice; benchmarking, which will allow countries to compare their education policies, practices and performance with those of other countries; mobilising key stakeholders in the internal education debate. The methodology used for single country reviews as part of Comparative Reviews of Education Policy is similar to that used in National Reviews of Education Policy (see above).

Comparative Reviews of Education Policy have a long tradition in OECD's work in education and are a key mechanism through which the Directorate for Education and Skills creates and accumulates knowledge across a wide range of education policy areas. The inaugural comparative review was the Thematic Review of the First Years of Tertiary Education, which ran between 1995 and 1998 with the participation of 12 countries, and was completed with the comparative report Redefining Tertiary Education (OECD, 1998). Since then, over fifteen other comparative reviews of education policy with a typical duration of three to four years were completed. The thematic review provides a complete list of these Comparative Reviews of Education Policy in chronological order.

A number of Comparative Reviews of Education Policy have had a long lasting impact on OECD's education work. Early Childhood and Care (ECEC) policy reviews, initiated in 1998 and whose prominence followed its seminal first comparative report Starting Strong (OECD, 2001), have thus far involved over thirty countries (and 23 country reviews) and remain active through regular meetings of the OECD ECEC Network (see below), more focussed policy reviews – e.g. 'Review of Quality Standards for ECEC' in 2017–18, 'Quality beyond Regulations in ECEC' in 2019–20, the planned 'ECEC in a Digital World' for 2021–22, and regular editions of its Starting Strong comparative series (whose next edition, Starting Strong VI, is planned for 2020). ECEC policy reviews also generated the knowledge and conceptual framework which guided the development of indicators on ECEC (OECD, 2017a), the OECD Starting Strong Teaching and Learning International Survey (whose first results were published in OECD, 2019a) and of the International Early Learning and Child Well-being Study (whose first results were published in OECD, 2020a).

Attracting, Developing and Retaining Effective Teachers was another influential review, involving 25 countries over four years of work (2002–2005), and whose comparative report Teachers Matter (OECD, 2005) provided the framework to analyse teacher policy at the OECD in subsequent years. A follow-up to this review was the development of the OECD Teaching and Learning International Survey (TALIS), whose 2018 edition comprised the participation of 48 countries. Another follow-up was the Study of School Leadership across 22 education systems, which led to the two-volume comparative report Improving School Leadership (OECD, 2008a; OECD, 2008b).

Around the same period, the Equity in Education Thematic Review (2003–2007), the initial comparative policy work undertaken by the Directorate for Education and Skills with a focus on equity in education and with the participation of ten countries, produced a comparative report No More Failures: Ten Steps to Equity in Education (OECD, 2007a) that reinforced the mainstreaming of equity analysis across OECD education policy reviews. It was followed by more focussed work on migrant students (Thematic Review of Migrant Education, 12 participating countries), revisited by the project Overcoming School Failure (8 participating countries), and extended in scope to issues of diversity and inclusion through the launch of the Strength through Diversity project in 2017.

Another significant area of OECD's education work, vocational education and training (VET), fundamentally benefitted from the work of two prominent policy reviews: the Thematic Review of Initial VET (2007–2010, 17 participating countries) which produced the Learning for Jobs comparative report (OECD,

2010a) (which was complemented with CERI's Review of Systemic Innovation in VET, 2007–2009, six participating countries, OECD, 2009); and the Thematic Review of Postsecondary VET (2010–2014, 20 participating countries) which produced the Skills Beyond School comparative report (OECD, 2014). This work had wide reach with its 31 country reviews (which continued on an ad-hoc basis since 2014), informed the development of VET indicators and led to further work in related areas such as work-based learning, apprenticeships and adult learning.

An influential comparative review for the policy debate on tertiary education was the 2004–2008 Thematic Review of Tertiary Education, which offered a holistic analysis of the key policy areas within tertiary education, involved the participation of 24 countries (with 14 country reviews) and produced the comprehensive comparative report Tertiary Education for the Knowledge Society (OECD, 2008c). This work was complemented by the Reviews of Higher Education in Regional and City Development, involving 34 reviews of cities and regions in 21 countries and producing the comparative report Higher Education and Regions: Globally Competitive, Locally Engaged (OECD, 2007b). More recently, as of 2015, the project Enhancing Higher Education Performance offers in-depth policy analysis of higher education topics such as labour market relevance and use of resources.

Two more recent instrumental comparative reviews were the Review on Evaluation and Assessment Frameworks for Improving School Outcomes (2009–2013) and the School Resources Review (2014–2020). The first of these reviews examined evaluation policies in 25 countries (including 14 country reviews) and delivered a comparative report Synergies for Better Learning (OECD, 2013), which proposes a holistic framework to analyse educational evaluation (bringing together student assessment, teacher appraisal, school evaluation and system evaluation). The second of these reviews examined resourcing policies in school education in 16 countries (including 12 country reviews), delivering three thematic reports, the first ever OECD analysis of The Funding of School Education (OECD, 2017b), analysis on the provision of school education in Responsive School Systems (OECD, 2018a), and a holistic analysis of human resources in Working and Learning Together: Rethinking Human Resource Policies for Schools (OECD, 2019b).

**Assisting countries setting their agenda: Diagnostic Policy Studies and analysing trends in education reforms**

OECD country-specific education policy work does not necessarily engage in policy recommendations. It can, instead, focus on policy diagnosis – i.e. understanding how one's education system is performing, where its strengths and challenges are, and what options for improvement exist. Policy diagnosis puts national practices and performance in an international context to help countries understand how their education system is faring in comparison to peer nations; and helps countries learn about the policies and practices of high-performing nations, or identify examples from other countries that they can use as a resource for policy development and learning. Three options for policy diagnosis exist.

*Education Policy Profiles*

Education Policy Profiles, produced since 2013, permit OECD member countries to benchmark their performance and identify key challenges for the education system at the student, institutional and system level. Country profiles are based on an OECD-developed common comparative framework, or template, that examines national education policies in an international context, bringing together evidence from a wide range of OECD resources, including international assessments and surveys, education indicators, and education policy reviews. The preparation of an Education Policy Profile, developed as part of the Education Policy Outlook project (see below), involves the collection of information every two to three years from country authorities, who provide standardised information on countries' policy practices, reform initiatives and system performance. By mid-2020, 47 country profiles had been produced, covering 35 countries. This information provides a comparative foundation for identifying policy challenges and reforms. An Education Policy Profile is prepared in co-ordination with country authorities, and contributes to mutual learning across countries on education policy reforms.

*Diagnostic Policy Studies*

Diagnostic Policy Studies provide an in-depth diagnosis of strengths, weaknesses, opportunities and threats on a single area of policy – such as initial teacher preparation – as part of an OECD project involving a set of countries with a shared policy concern. Diagnostic studies connect practitioners,

researchers and policy experts from across the OECD, culminating in a report that assists countries in setting their own policy agenda and priorities for reform. Diagnostic policy studies are ideally suited to countries that do not seek policy recommendations, but do need a highly focused, deep and peer-engaged analysis of a longstanding policy challenge. A Diagnostic Policy Study starts with a research-based conceptual framework and supporting data that are developed by the OECD, and a self-study produced by participating countries. This is followed by a rigorously structured and rapid in-country study visit to interact with national stakeholders. Countries receive a brief report with a diagnostic analysis made by the panel. The inaugural Diagnostic Policy Study was the the OECD Initial Teacher Preparation (ITP) Study, organised between 2015 and 2018 in collaboration with seven countries and completed with the comparative report A Flying Start: Improving Initial Teacher Preparation Systems (OECD, 2019c). The follow-up Teachers' Professional Learning (TPL) Study was initiated in 2019.

*Education Policy Perspectives*

Education Policy Perspectives are highly focused examinations of specific education topics, the result of either a synthesis of broader thematic analysis or the application of OECD-related knowledge to the context of a specific country. In its country-specific modality, countries themselves identify a topic, priority or policy challenge that is important to them, and the OECD brings together internationally comparable evidence and expertise about key comparator countries, providing solution-oriented documents (e.g. Improving the Teaching Profession in Romania). These Education Policy Perspectives are suitable for countries that have clearly identified a key issue or challenge in their system and would like a quickly delivered summary of key evidence on this subject from an international perspective to inform the policy debate or selection of a policy response. The preparation of an Education Policy Perspectives typically involves desk-based analysis that draws upon the OECD's extensive data resources, its policy reviews and publications, and education research.

*Monitoring education policy reforms: the Education Policy Outlook*

Education policy work at the OECD requires the continuous monitoring of policy priorities, policy developments and policy reforms across countries from early childhood education to adult education. This function is accomplished since 2013 by the Education Policy Outlook, an analytical observatory of

education policy reforms across countries that reviews how education policies are evolving, and how they can be best implemented or improved over time. The Education Policy Outlook looks into the overall lifecycles of education policies (e.g. implementing, evaluating, improving or sustaining education policies), to analyse the evidence underpinning these processes, and factors influencing their success. The Education Policy Outlook builds upon a variety of knowledge produced within and beyond the OECD. It analyses existing OECD knowledge gathered on a country, such as large-scale data collections (e.g. PISA), or country reviews and thematic work. Its comparative reports, the most recent of which was published in 2019 (OECD, 2019d), deliver comparative insights into education policy trends and review a wide range of specific country policy reforms, disseminating this knowledge across countries and informing reforms in other countries.

**Building consensus and learning from each other: policy dialogues and peer learning activities**

In its education policy work, the OECD also promotes policy dialogues that are grounded in expert knowledge and international practice and evidence, providing national policy makers with an opportunity to build agreement about options for policy development. The OECD organises both national policy dialogues that are grounded in its own studies and expertise and peer-learning activities that build on expert networks drawn from across the world – or a combination of the two.

National policy dialogues are based in OECD research and analysis and organised in collaboration with the OECD to bring national stakeholders together in meetings and workshops. The OECD provides national policy communities with an external, expert and independent presence that can help countries rethink and refocus national policy discussions, and can collaborate with national partners who are engaged in policy diagnosis, development or implementation. National policy dialogues draw upon OECD policy reviews, surveys and analysis, and apply them to national contexts for country-identified policy challenges. They often follow Education Policy Country Reviews or Country Implementation Support (see below), and can be organised to help further disseminate the findings and recommendations of a review. Alternatively, they may be a standalone activity providing original analysis that supports new discussions about policy challenges faced by countries.

Peer-learning activities bring the OECD's international network of practitioners, researchers and policy makers together to support policy learning across countries. Peer-learning activities can be custom events or analyses organised at the request of a country to address their specific needs, or an ongoing event or group regularly convened by the OECD bringing together several countries for peer learning. A prominent high-level ongoing peer-learning event is the International Summit on the Teaching Profession (ISTP), organised annually since 2011, which brings together ministers of education and teacher union leaders from high-performing and rapidly improving education systems to share best practices, identify common challenges and discuss future policy options. A volunteering country acts as host and organiser of the event, while the OECD and Education International co-organise the event and provide advice and inputs for the content. Another high-level on-going peer-learning event, the OECD Education Policy Reform Dialogues, organised annually since 2018, brings together senior education policymakers to share and build experience on issues around the design, development and effective implementation and evaluation of education policies. The Dialogues are informed by the Education Policy Outlook's comparative work. In addition, ongoing peer learning is supported by peer groups organised by the OECD, such as the OECD Network on Early Childhood Education and Care (since 2007), the OECD Skills Strategy Peer Learning Workshops (since 2014) and the OECD Strength through Diversity Policy Fora (since 2017).

Custom peer learning is initiated to meet the knowledge needs of national stakeholders who want to understand how other countries are addressing policy challenges that they face, or the policy options other countries have debated and adopted. The OECD does this by planning and managing peer-learning events, such as focused seminars or workshops. For example, CERI's Strategic Education Governance (SEG) Learning Seminars bring together three to four countries/systems where participants learn about effective or innovative governance policy practice in other countries and context-specific obstacles and enablers, and identify governance options and possible trajectories for future action. Alternatively, it can provide peer-learning analysis, in which it partners with countries to identify and guide experts from peer countries; plans and moderates the work of an international expert panel; and synthesises the work in customised OECD product. This includes a new variant of Education Policy Country Reviews, known as Country Peer Analysis Reviews. These reviews are initiated at the request of a single country to gain in-depth knowledge of the experience of carefully selected countries in a specific education policy area – e.g. consolidation of higher education institutions (Williams, 2017); indigenous education (OECD, 2017c); gender disparities in

education (Borgonovi et al., 2018). Countries use this evidence to support their own policy development and design, e.g. bringing peer experience to widen or confirm their repertoire of policy options, or to identify whether policies they plan to adopt have been effective when adopted in other nations. A Country Peer Analysis Review leads to a concise customised report providing a description and analysis of policy approaches in peer countries in the specific education area under analysis.

**Making effective change happen: policy implementation support and strategic advice**

Successful reforms require effective policy implementation, which translates intentions into effects in the world of educational practice. Education stakeholders may not understand or embrace reforms. Organisations may lack the capacity or leadership for effective implementation, and policy makers may find they have a shared policy vision, but lack agreement about what actions need to be taken, and by whom.

In the aftermath of the financial crisis, in 2007 the OECD started to look systematically at the political economy of reform, following a call by countries to not only look at 'where to go' but also 'how to get there' (OECD, 2010b). The publication Making Reform Happen, which reviewed reform experiences of OECD countries across a range of policy domains, marked the growing emphasis on policy implementation in OECD's analytical work (OECD, 2010b). In education, the first major initiative focussing on reform implementation was the two-year programme to Improve the Quality of Education in Mexican Schools, launched in 2008. This programme provided analysis, advice and communication on school leadership, teacher policy and assessment to assist Mexico in implementing education reform, summarised in the final report Improving Schools: Strategies for Action in Mexico (OECD, 2010c). This work involved a wide range of stakeholders, direct participation by teacher unions and the guidance of steering committees with national and international experts. Education Policy Country Reviews have also increasingly incorporated aspects of implementation. They provide evidence-based actionable policy recommendations that take into account countries' contexts, including political feasibility and resource constraints; and include considerations about implementation such as capacity building requirements, resource needs and consultation mechanisms.

At the same time, new products and services with greater focus on education policy implementation have recently emerged. As part of the Implementing Policies: Supporting Effective Change in Education project, started in 2018, the OECD proposes comparative analysis, practical guidance and support to governments to achieve success in the implementation of their education reforms. Its research-based framework proposes that a coherent implementation strategy builds on smart policy design, inclusive stakeholder engagement and a conducive context to be effective. At the request of single countries, tailored implementation support focuses on providing support in the implementation of a concrete education reform through analysis and stakeholder engagement to ensure impact. Following agreement on the policy area to cover, the country can select among: an Implementation Policy Assessment to take stock of the policy reform and deliver an assessment of ways forward with its implementation (involving a visit by an OECD-led team to meet key stakeholders); Implementation Strategic Advice for the implementation of the policy (ranging from reviewing documents [e.g. education strategic plans or white papers], to participation in strategic events) and/or Implementation Seminars that engage stakeholders in the country in developing a joint understanding and concrete action plans for the implementation of the policy, and contribute to capacity building.

Country-specific implementation supports improve the comparative knowledge of education policy implementation and provide peer-learning opportunities to help governments to design education policies. Examples include implementation support to Wales in introducing its new curriculum (OECD, 2020b) and developing schools as learning organisations (OECD, 2018b) (since 2016); to Norway in implementing its New Competence Development Model (2018–19) (OECD, 2019e); to Ireland in reviewing its Senior Cycle Education (2019–20); and to Austria and Estonia in supporting the implementation of an education monitoring system (started in 2019).

OECD's Education Governance Case Studies, conducted as part of CERI's Governing Complex Education Systems project (which ran between 2011 and 2016), provided countries with an opportunity to reflect on and share the governance challenges they faced in implementing education reforms. The case studies focussed on a reform in a specific education system and analysed the entire reform process, from the genesis of the idea and goals to implementation and evaluation, drawing upon guided contributions of national experts who worked within an OECD-developed analytic framework. The case studies provided insights to questions of education governance, in particular how to implement education reform successfully. They examined how central

governments design, organise and steer education systems across complex multi-level governance arrangements; how stakeholders are engaged and supported in policy reforms; how knowledge is developed and used to guide reforms; and how central and the local governments work with one another, managing conflict and establishing relationships of trust and co-operation. Six Case Studies were undertaken, reviewing education reforms in six European countries. The project was completed with the publication Governing Education in a Complex World (Burns & Köster, 2016) alongside a publication with lessons from the case studies, Education Governance in Action (Burns et al., 2016).

As of 2012, the OECD also offers to countries the opportunity to participate in a National Skills Strategy project. These were originally launched by the Directorate for Education and Skills, as part of OECD's horizontal Skills Strategy project, and are currently offered by the OECD's Centre for Skills. These are collaborative projects with inter-ministerial national project teams that use public engagement and analysis of comparative data to provide a strategic assessment and recommendations to improve national performance in developing and using skills, and to strengthen the governance of national skills systems. Located at the intersection of education, labour market, industrial and other policies, skills policies require a whole of government approach. Each National Skills Strategy country project offers a highly tailored approach to focus on the unique skills challenges, context and objectives of each country. Each project leverages OECD comparative data and policy analysis, fosters collaboration across ministerial portfolios and levels of government while engaging all relevant stakeholders – employers, trade unions, workers, teachers, students and civil society organisations (OECD, 2019f). Interactive workshops help promote a shared understanding among national stakeholders of the skills challenges their country faces, providing a strong basis to move from shared diagnosis to developing and implementing concrete actions.

A National Skills Strategy proposes reports of two types: (i) Assessment and Recommendations reports, to reach a shared understanding of the skills challenges and opportunities, identify priority areas for action as well as to make recommendations and build commitment for policy reform; and (ii) Implementation Guidance reports, which provide specific advice on the design and implementation of skills policies and/or on the development of strategic plans. As of early 2020, seventeen countries had engaged in a National Skills Strategy, with the first two Assessment and Recommendations reports published in 2014 for Austria and Norway (referred to as diagnostic reports until 2017). These country-specific reports led to the publication of comparative reports

in 2019 – Skills Strategy: Skills to Shape a Better Future (OECD, 2019f) and in 2020 – Strengthening the Governance of Skills Systems: Lessons from Six OECD Countries (OECD, 2020c). These reports focus on three broad components to a Skills Strategy: Developing relevant skills over the life course; Using skills effectively in work and society; and Strengthening the governance of skills systems (OECD 2019f, 2020c).

**Bringing it all together: the Education GPS**

Today, all of the most recent, policy-relevant education data and analysis, including country-specific work, produced by the OECD are mobilised in a single accessible platform – the OECD's Education GPS. The Education GPS is a cutting-edge online navigation system that integrates the OECD's most timely and reliable international education data, analyses and policy advice from across a range of publications and delivers them in a user-friendly, customisable and tailored format. It is organised in three strands: 'Analyse by country', giving easy access to country-specific reports; 'Explore data', based on OECD education surveys and indicators; and 'Review education policies', providing OECD's key insights and policy options for a wide range of topics in education.

## Notes

[1] For these and all the following keywords in 'light font', see the electronic version of the CIDREE Yearbook 2020 where the hyperlinks are provided (www.cidree.org/publications).

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# Education reports: information and contact

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