

# Education in Lithuania

HIGHLIGHTS

2017



## WHAT ARE OECD REVIEWS OF NATIONAL POLICIES FOR EDUCATION?

Reviews of National Policies for Education provide tailored advice to governments to develop policies that improve the skills of all members of society, and ensure that those skills are used effectively, to promote inclusive growth for better jobs and better lives. The OECD works with countries to identify and understand the factors behind successful reforms and provide direct support to them in designing, adopting and implementing reforms in education and skills policies.

## WHY A REVIEW OF EDUCATION IN LITHUANIA?

In 2015, the OECD opened discussions for the accession of Lithuania to the OECD Convention. As part of this process, Lithuania has undergone in-depth reviews in all the relevant areas of the Organisation's work including a comprehensive

review of the education system, from early childhood education and care to tertiary education.

The report (*Education in Lithuania*), part of the series Reviews of National Policies for Education, evaluates national policies and practices in Lithuania in education and skills, compared to OECD member countries. It does so according to five core principles that are essential to effective education systems: a strong focus on improving learning outcomes; equity in educational opportunity; the ability to collect and use data to inform policy; the effective use of funding to steer reform; and the extent of multistakeholder engagement in policy design and implementation.

Based on tough benchmarks, the review both underlines the many strengths of Lithuania's education system and provides recommendations on how to improve policies and practices so that the country can advance towards OECD standards of education attainment and outcomes.

Basic indicators (2015 or latest year available)	Lithuania	OECD
Population aged less than 15 as a percentage of total population	14.6%	18%
GDP per capita (USD PPP)	26 700	40 589
Gini coefficient of income inequality	0.35	0.31
Public expenditure on education as a percentage of GDP	3.9%	5.6%
Enrolment in ECEC among 4-year-olds	83%	85%
PISA mean performance in sciences	475	493
Share of low achievers in PISA	24.7	21.2
Share of top performers in PISA	4.2	7.7
Percentage of 25-34 year-olds who have attained tertiary education	55%	42%

Right: **Angel Gurría**,  
OECD Secretary-  
General, and **Dalia  
Grybauskaitė**,  
President of Lithuania,  
12 November 2013,  
Paris. © OECD

These highlights summarise the main findings of the review:

- **The early childhood sector should focus on expanding participation in rural communities and assuring the quality of provision throughout the nation.** High quality early childhood education and care can play a vital role in reducing the impact of social disadvantage.
- **In primary and lower secondary education, improving learning outcomes must become the focus of policy and practice.** Improvement requires particular attention to two key inputs to learning – instructional time, and teacher quality.
- **Upper secondary vocational education, focused at present on increasing attractiveness to students, must raise the quality of provision and then clearly communicate evidence of this to parents and students.** Upper secondary general education must focus on assessing learning in ways that support a comprehensive, competency-oriented curriculum.
- **Comprehensive consolidation of public higher education is needed to achieve efficiency in provision, and to raise the quality of research and instruction.** In the longer run – after addressing the urgent and important question of system scale and organisation – policy makers should turn their attention to overlooked questions of equity within their tertiary system.

***“The accession process that Lithuania will go through is a transformational opportunity. It will improve the lives of their people and serve as a catalyst for reform. I am sure that our member countries will also learn a lot from Lithuania’s experience and best practices.”*** – Angel Gurría, OECD Secretary-General, 8 July 2015, Paris





## Wide participation is not yet matched by high performance

**Lithuania has made significant progress in the past decade in ensuring wide access to early childhood education and care. Enrolment among children aged three to six years increased from 70% in 2005 to 87% in 2015. Enrolment in primary and lower secondary education is universal: in 2015, the net enrolment rate in primary education was 100%, and 98.3% in lower secondary education. Lithuania's level of participation in upper secondary education is among the highest in OECD and partner countries: in 2014, 93% of 15-19 year-olds were enrolled in educational institutions, compared with 84% on average across OECD countries. Participation in tertiary education is especially high as well: in 2014, 41% of 20-24 year-olds in Lithuania were enrolled in tertiary education, a share higher than all but three OECD member countries.**

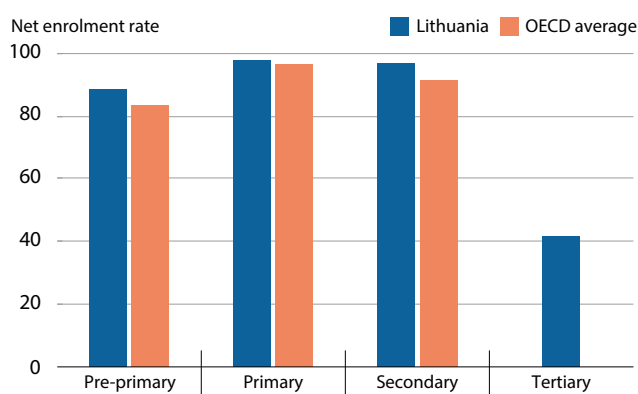
Although participation in primary, secondary and tertiary education in Lithuania is especially high, the performance levels are not. While rates of grade repetition are low and rates of schooling completion are high, learning outcomes, as measured by PISA, are consistently below OECD averages. Relatively few Lithuanian students perform at the highest achievement levels, and the performance of its 15-year-olds trails that of its Baltic neighbours. The school-based vocational pathway offered in secondary education is not well regarded in Lithuania, and is taken up by fewer students than in many other countries. Efforts to raise esteem and participation are underway, but have not yet shown results.

Swiftly declining school-age cohorts have placed enormous pressure on Lithuania's network of school and higher education institutions. Between 2010 and 2014 the number of students enrolled in upper secondary education fell by over one quarter, from 108 000 to 79 000. During those

same years tertiary enrolments fell by 32%, and four of the nation's 14 public universities are forecast to have no incoming students by 2019. Many municipal officials have worked diligently to consolidate their network of schools, and national authorities have assisted them with this. Nonetheless, the average student/teacher ratio in Lithuania for its primary, lower and upper secondary schools is well below OECD averages.

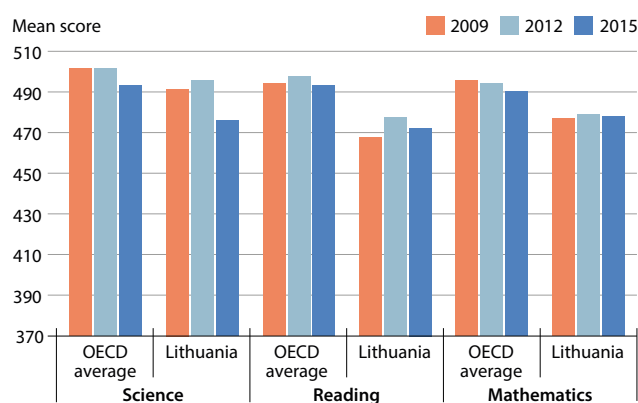
The nation's public universities and colleges have undergone very limited consolidation, and Lithuania continues to maintain a distinctively large number of small public universities – far more per one million inhabitants than many other small European nations. Its higher education sector performs well below OECD averages with respect to research and innovation, and it remains weakly engaged in international research collaboration and student mobility.

**Figure 1. Net enrolment in Lithuania and OECD average (2014)**

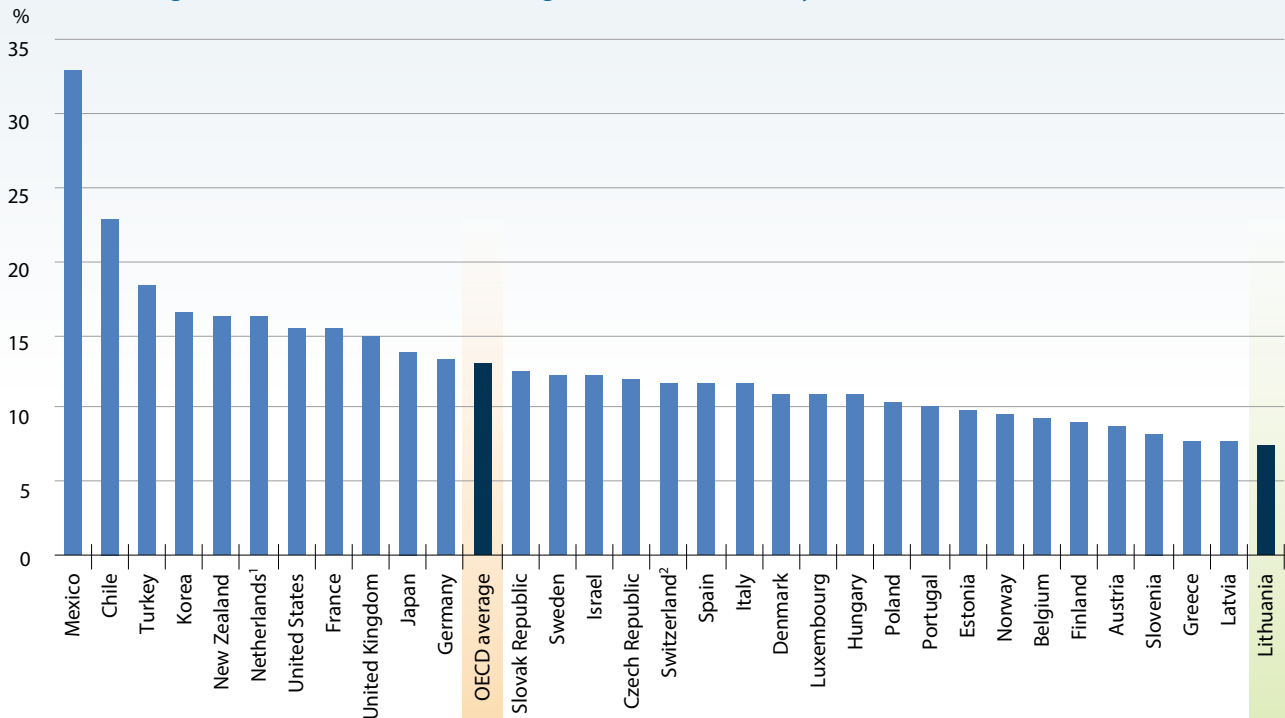


Note for Figure 1: Data for net enrolment rates for the OECD refer to 2012. Tertiary education for Lithuania refers to bachelor's, master's or equivalent level. Data for tertiary net enrolment rates for the OECD are not available.

**Figure 2. Mean score of Lithuania and OECD average in PISA**



Source: UNESCO-UIS (2016), "Net enrolment rate by level of education", *UNESCO UIS database*; Statistics Lithuania (2016), *Official Statistics Portal*, Statistics Lithuania; OECD/United Nations/CAF (2014), *Latin American Economic Outlook 2015: Education, Skills and Innovation for Development*, <http://dx.doi.org/10.1787/leo-2015-en>; OECD (2016a), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, <http://dx.doi.org/10.1787/9789264266490-en>; OECD (2017), *Education in Lithuania*, *Reviews of National Policies for Education*, <http://dx.doi.org/10.1787/9789264281486-en>

**Figure 3. Ratio of students to teaching staff in lower secondary educational institutions (2014)**

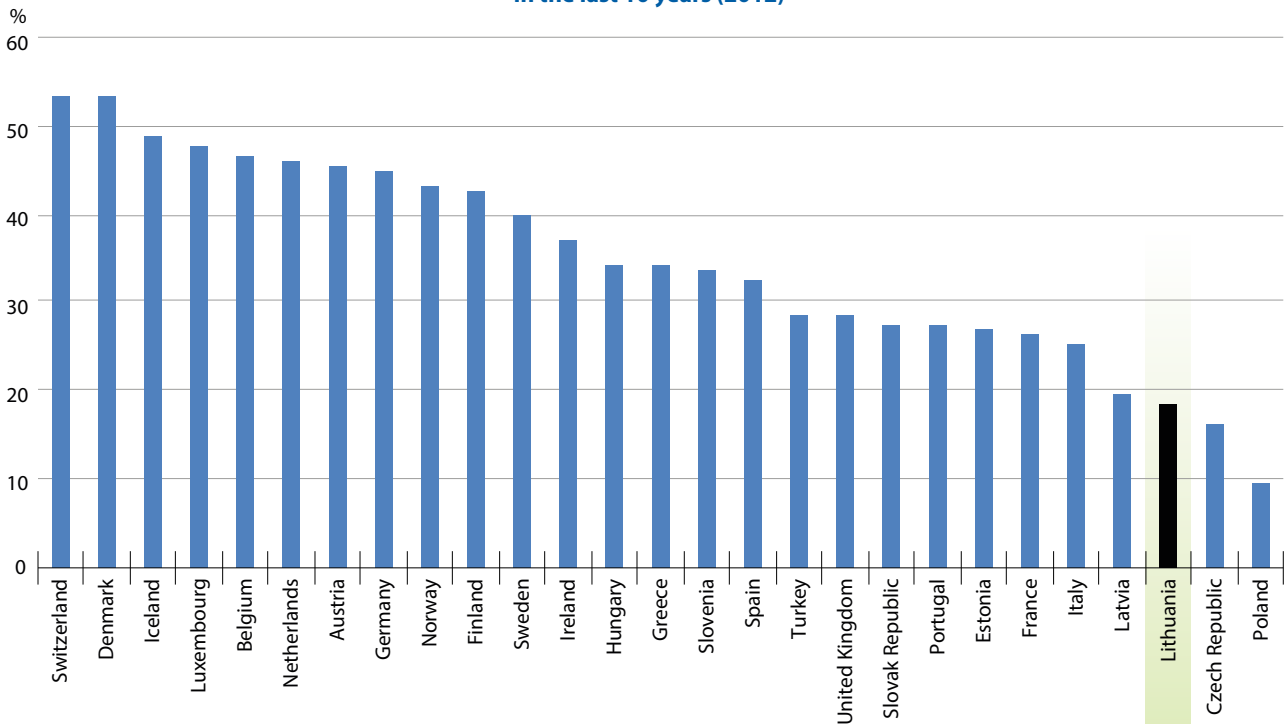
Notes:

1. Year of reference 2013.

2. Public institutions only.

Countries are ranked in descending order of ratio of students to teaching staff in vocational programmes in lower secondary education.

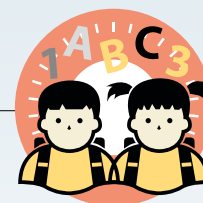
Source: OECD (2017), *Education in Lithuania*, Reviews of National Policies for Education, <http://dx.doi.org/10.1787/9789264281486-en>

**Figure 4. Share of higher education institution researchers who have worked abroad for more than 3 months in the last 10 years (2012)**

Note: Countries are ranked in descending order of the share of higher education institutions researchers who have worked abroad for more than 3 months in the last 10 years.

Source: IDEA Consult et al. (2013), "Support for continued data collection and analysis concerning mobility patterns and career paths of researchers", Final Report MORE 2 to the European Commission, [https://cdn2.euraxess.org/sites/default/files/policy\\_library/report\\_on\\_survey\\_of\\_researchers\\_in\\_eu\\_hei.pdf](https://cdn2.euraxess.org/sites/default/files/policy_library/report_on_survey_of_researchers_in_eu_hei.pdf).

OECD (2017), *Education in Lithuania*, Reviews of National Policies for Education, <http://dx.doi.org/10.1787/9789264281486-en>



## Early childhood education and care

**The importance of early childhood education and care (ECEC) is well recognised in Lithuania. The Lithuanian ECEC professional community shares a tradition of concern with the structural dimensions of ECEC quality – ensuring adequate space, group sizes, staffing, facilities and hygiene – and it has developed a widely shared understanding of the essential cognitive, emotional and social skills that children need to develop in their early years. Levels of participation in ECEC are high, especially in urban areas. However, participation in ECEC lags in the nation’s rural areas, where the incidence of poverty and ill health are highest, and young children might benefit most from access to high quality ECEC.**

### EXPAND PARTICIPATION IN ECEC

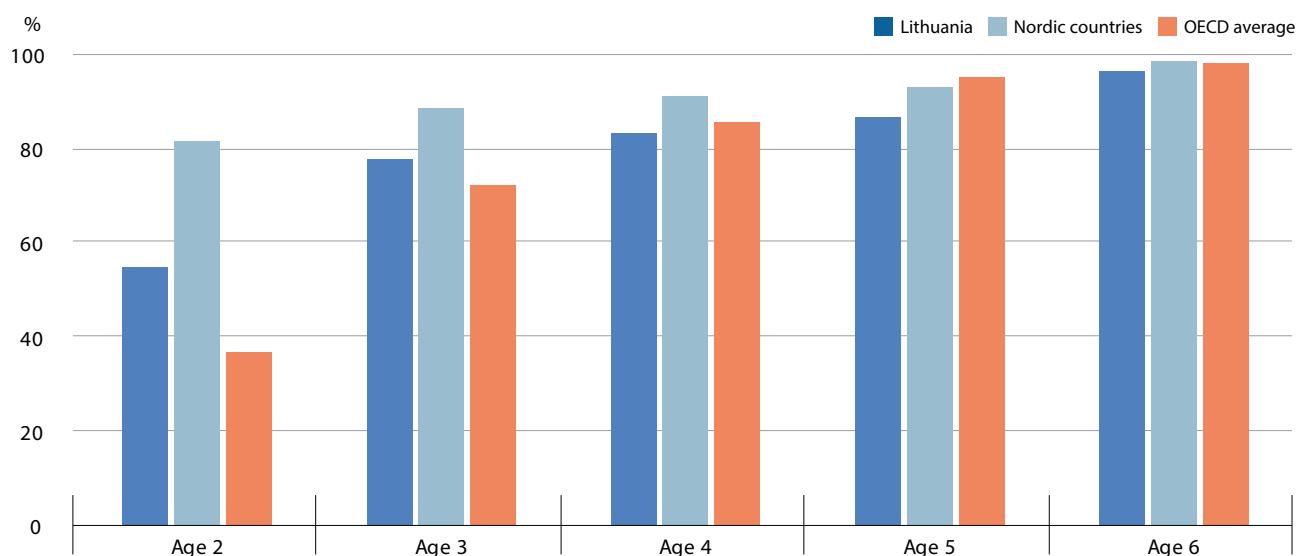
Lithuania has made significant progress in the past decade in increasing participation in early childhood education and care. Enrolment among children aged three to six years increased from 70% in 2005 to 87% in 2015, while among children aged one to two years, it rose from 22% in 2000 to 35% in 2015.

Efforts have been made to boost rural participation. Lithuania has opened multi-functional centres in rural areas to boost the supply of ECEC places, it has made dedicated public transportation available to some rural families, and it has made information on the importance of ECEC available to parents through a website intended to encourage parents to enrol their children in ECEC. Initiatives have also been undertaken to widen supply in urban areas. Legislative changes were adopted to relax Soviet era “hygiene standards”, permitting early childhood

education and care to be provided in a wider range of accommodations. To stimulate provision, the Lithuanian central government authorised municipalities to use the funding received through the central funding formula for teaching costs, the “student basket”, to support provision in private ECEC facilities, as well as public facilities. As a consequence of these changes, the number of private kindergartens has been steadily increasing, and in 2016, 25 of the country’s 60 municipalities had private kindergartens.

Notwithstanding these initiatives, waiting lists persist in some urban areas, indicating supply has not yet fully met demand, while in rural areas participation in ECEC among children ages 1-6 (33%) lags far behind that in urban areas (83%). ECEC policy must therefore focus on the distinctive circumstances in both areas: raising parental demand in rural communities, and identifying sustainable and equitable models for expanding public supply or subsidising private facilities in urban areas.

**Enrolment rates in early childhood and primary education, by age (2014)**



Source: OECD (2017), *Education in Lithuania*, Reviews of National Policies for Education, <http://dx.doi.org/10.1787/9789264281486-en>

## STRENGTHENING QUALITY ASSURANCE

Lithuanian national authorities have chosen to decentralise responsibility for early childhood education – its funding, provision, curriculum, and oversight of its quality – to schools and municipalities. Lithuanian preschools are responsible for assuring the quality of their provision, and receive guidance from the Ministry of Education and Science (MoES) on how to conduct an internal quality audit. The external assurance of quality for ECEC rests with municipality education departments, who are charged with undertaking a comprehensive inspection at intervals they judge appropriate.

Municipal authorities with whom the review team met indicated that they did not have formal monitoring plans in place, and that they relied upon problems being brought to their attention by parents. Guidance provided by the Ministry of Education does not provide a template that municipal education departments can use to monitor and inspect the quality of ECEC provision on an ongoing basis. Further, apart from a small number of the nation's largest and most urbanised areas, municipal education departments do not have staff specialised in early childhood education and care.

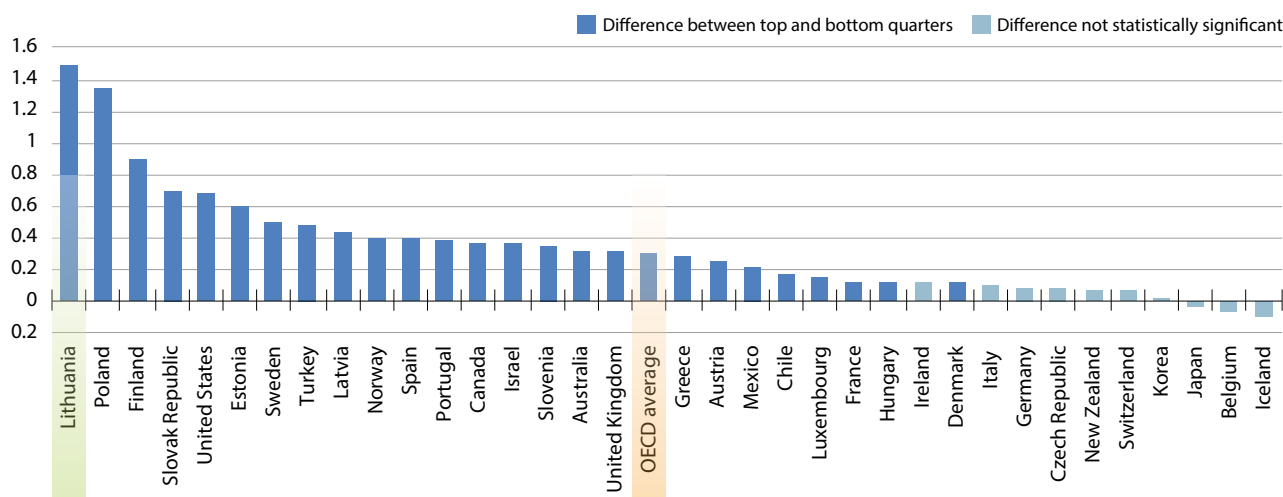
National policy makers should give priority to developing a more comprehensive monitoring system that encompasses monitoring of quality, thereby ensuring that Lithuanian children receive consistently high-quality early childhood education and care.

## STRENGTHENING PROVISION FOR CHILDREN WITH SPECIAL EDUCATION NEEDS, AND FOCUSING ON HEALTH AND NUTRITION FOR ALL

Lithuania has established a clear statutory basis for the educational integration of children with special education needs (SEN), provided augmented financial support to assist with educational services, and developed a national network of specialists to support teachers by providing tools for assessment. However, room for improvement remains. In rural areas, where disadvantaged children and special education needs are greatest, specialists such as psychologists and speech therapists are in short supply, and better options for sharing specialist resources are needed. The process of identifying special education needs children is not consistent from one municipality to the next, increasing the odds that some children are not identified. Pre-school and pre-primary teachers do not have sufficient knowledge and skills to detect and understand individual needs and to individualise education content and methods even after receiving diagnoses and recommendations from specialists.

Children who do not have special education needs require a healthy environment and proper nutrition. In Lithuania, the health care system plays an important role in ECEC by providing a first point of contact for children with special needs and, in rural areas, carrying out the monitoring of ECEC facilities and providing information on ECEC to expecting parents. Focusing on opportunities to improve points of contact – now more limited than they could be – can improve children's well-being.

**Difference in ECEC attendance rates between 15-year-olds from disadvantaged backgrounds, PISA 2015**



Source: OECD (2017), *Education in Lithuania*, Reviews of National Policies for Education, <http://dx.doi.org/10.1787/9789264281486-en>



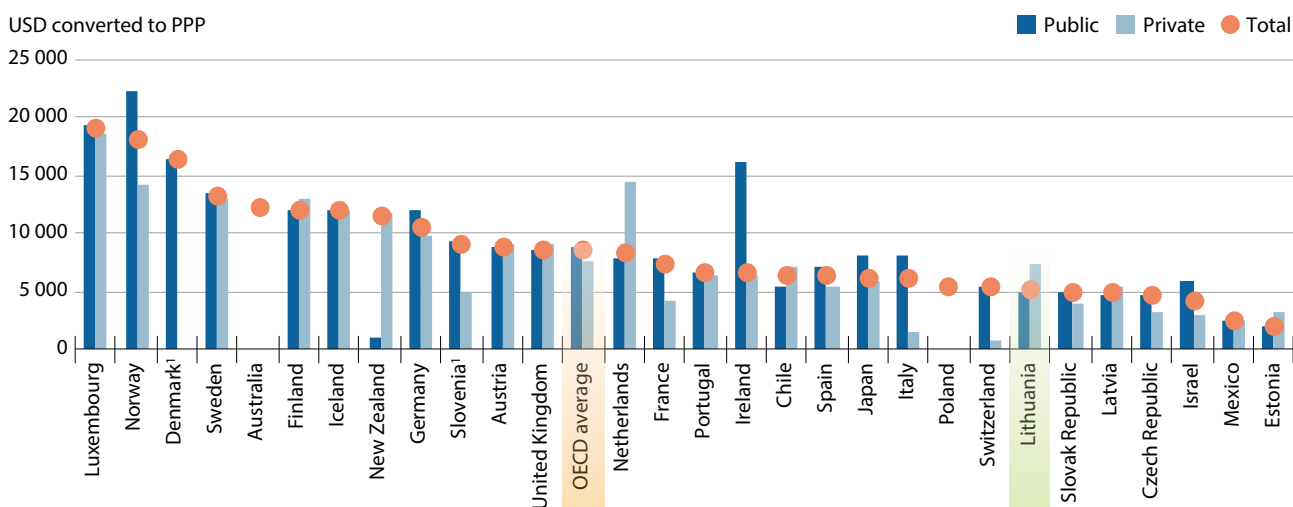
### SUPPORTING THE CONTINUING DEVELOPMENT NEEDS OF THE ECEC WORKFORCE

Recruiting, training, and supporting care providers and teachers are central to the quality of provision. Lithuanian teachers are required to hold a bachelor’s degree and are trained before beginning work in ECEC settings. They receive compensation under the same policies as other teachers in the education system. Teachers in Lithuania are considered a highly-qualified workforce compared to many OECD countries, an asset that can be further developed to continue strengthening the ECEC system. Moreover, Lithuania views professional development for

teachers as a required part of their ongoing service, on a par with other European Union countries that invest in professional development (European Commission/EACEA/Eurydice/Eurostat, 2014).

Despite the official acknowledgement of the importance of professional development in national guidance documents, school heads report that professional development funds are insufficient to permit teachers to participate in regular development activities such as learning how to communicate effectively with parents; teaching children with special needs; or administering and using assessment information on children’s development and learning.

**Annual expenditure by early childhood educational institutions per student (2013)**



Note: 1. Includes some expenditure on childcare.  
2. Countries are ranked by descending order.

Source: OECD (2017), *Education in Lithuania*, Reviews of National Policies for Education, <http://dx.doi.org/10.1787/9789264281486-en>



## OECD RECOMMENDATIONS FOR EARLY CHILDHOOD EDUCATION AND CARE

**Expand participation in rural areas** by focusing on stimulating parent demand for services. Work with hospitals to educate new parents about the benefits of ECEC, and enlist advocates among paediatricians and other health professionals who provide ongoing care to small children. Lithuania should also consider significantly expanding home visiting, ensuring regular visits to rural families to discuss topics related to child health and development.

**Expand access to ECEC in urban areas by creating sustainable and equitable funding models for expanding supply.**

One model for expanded provision is to have families make a contribution to ECEC places based upon their ability to pay – which is assessed according to a common methodology. This arrangement would provide additional ECEC funding by obtaining payments from those families with the ability to pay fees that are not doing so under present arrangements.

**Develop comprehensive quality monitoring.**

(a) **Municipal education officials could be tasked with monitoring the quality of care** through the implementation of a quality monitoring template developed through consultation among Ministry staff, municipal education officials, providers and researchers. This template would lay out what are developmentally-appropriate activities, suitable learning materials/resources at these stages, effective learning practices, and acceptable ways of assessing early learners. The Ministry of Education and Science would provide municipal officials guidance – or requirements – about the frequency of monitoring, and it would take steps to ensure that municipalities across the country have access to staff who are expert in ECEC to assist them in meeting their responsibilities. This could be done, for example, by expanding the ECEC capabilities of the Ministry's regional support centres.

(b) Alternatively, national authorities could **locate responsibility for external quality assurance with the National Agency for School Evaluation** – as is done at present for primary and secondary schooling. This option would permit Lithuania to take advantage of existing national capabilities, and ensure that municipalities do not experience conflicting interests that arise from being founder, funder, and quality monitor of pre-school institutions.

**Standardise the procedure for referring children with special needs**, by relying on one scale or set of criteria across municipalities, which will help ensure that children receive the same opportunities for services regardless of where they live.

**Strengthen SEN curriculum** in pre-service training programmes to improve the capacity of the teaching workforce to support SEN students. Given the age and continuity of the teacher workforce, in-service training is needed as well.

**Engage the Ministry of Health** in the creation of a quality monitoring system. Consider the integration of health dimensions into quality monitoring, or a system that integrates both health and ECEC.

**Train paediatricians and other health care professionals** on the basic elements of ECEC, including identification of children with special needs and the importance of ECEC overall.

**Invest more time in training teachers in classroom settings** as part of initial teacher training, with emphasis on training teachers in interacting with young children and using the curricula and methodological guidelines available.

**Partner with teacher training institutions** to develop coaching and mentoring models for teachers already in classrooms. The strong connections with teacher training institutions for ECEC could be further expanded to include training or mentoring for teachers on site, through observations and feedback on teacher-child interactions and classroom practices.

**Embed professional development into the process of quality monitoring**, creating a system that focuses on measuring quality, reflects on results, and supports teachers in making improvements based upon monitoring. If quality monitoring is integrated with professional development, investments in monitoring will be more likely to lead to changes in quality in classrooms.





## Primary and lower secondary education

**Lithuanian students, on average, leave primary and lower secondary education with a sufficient level of knowledge in science, mathematics, and reading that approaches international standards. Nearly all students continue learning in upper secondary education beyond compulsory education. All of this is accomplished in a schooling system that provides wide autonomy to school leaders and teachers, and it is achieved on comparatively modest levels of spending.**

Nonetheless, there are important challenges ahead for primary and secondary schooling in Lithuania. Continuing declines in the size of the school-age population challenge authorities to efficiently manage the nation's school network. The nation's capacity to replenish its teaching workforce is hampered by unattractive conditions of employment, an unclear vision of what good teaching practices are, and what sort of training can best promote good teaching. Although students acquire curriculum-based content knowledge in mathematics, reading, and science on par with international levels, their performance in PISA reveals that they are persistently less successful in using and applying knowledge than students in peer countries in the region. While Lithuania has achieved equitable outcomes among its language minority populations, some other populations – especially

rural students – lag behind. Lithuania has developed a framework of external assessments with which to monitor student learning across primary and secondary schooling, however it could make fuller use of these assessments in ensuring the quality of schools and linking them to the management of schools and classroom instructional practices.

### ENHANCING THE CAPACITY OF LITHUANIAN STUDENTS TO USE KNOWLEDGE AND SKILLS

The science, mathematics and reading assessments in PISA show that Lithuania's performance consistently trails the OECD average and its regional peers. Small proportions of Lithuanian students attain the highest proficiency, Levels 5 and 6, completing the most challenging tasks in mathematics, reading and science. At the same time, there is a slightly larger share of Lithuanian students as compared to the OECD average among low performers who score below Level 2 in mathematics, reading and science.

The influence of family socio-economic and cultural status on student performance in Lithuania is similar to the OECD average. However, urban/rural differences in socio-economic and cultural status of students are especially wide, and the performance of students from rural areas is persistently lower than that of urban students, and by a wider margin than is typical within the OECD. Gender differences in student performance are wider than the OECD average and regional peers, with Lithuanian boys performing at especially low levels in reading proficiency.

Comprehensive initiatives are needed to raise performance across the board, and these should be joined by targeted measures, especially those supporting rural students. The most promising and easily implemented near-term policy option for comprehensive improvement in learning achievements is to focus on instructional time, which in Lithuania is about one year less than the OECD average. In addition, policies with a focus on rural and male students could reduce existing performance gaps.



### ESTABLISHING CONDITIONS FOR A HIGH QUALITY AND ATTRACTIVE TEACHING PROFESSION

The teaching workforce of Lithuania is substantially older and more female than either the OECD or EU22 average. The gross annual statutory salary level of Lithuanian teachers is lower in relation to GDP per capita than that of teachers in all the other EU countries. The quality of entrants to teacher training programmes, the performance of teacher training programmes, and the attractiveness of the teaching profession are matters of concern both to the Ministry of Education and Science, and the wider education community.

Developing a more able and effective teaching workforce is a long-term undertaking, especially in Lithuania, where falling enrolments and a declining number of teachers have limited the turnover in the teaching workforce, and thus the rate at which newly-trained entrants enter the classroom. A shared understanding of good teaching and how to achieve it has not been established, and this has hindered the development of a teacher workforce policy. This arises, in part, from the limited capacities of the Ministry to co-ordinate policy, and from the limited development of the education research community.

### IMPROVING QUALITY ASSURANCE, SCHOOL MANAGEMENT, AND CLASSROOM PRACTICE THROUGH IMPROVED USE OF ASSESSMENTS

Lithuania has developed extensive capabilities to implement external large-scale assessments of students in primary and secondary schooling. National external assess-

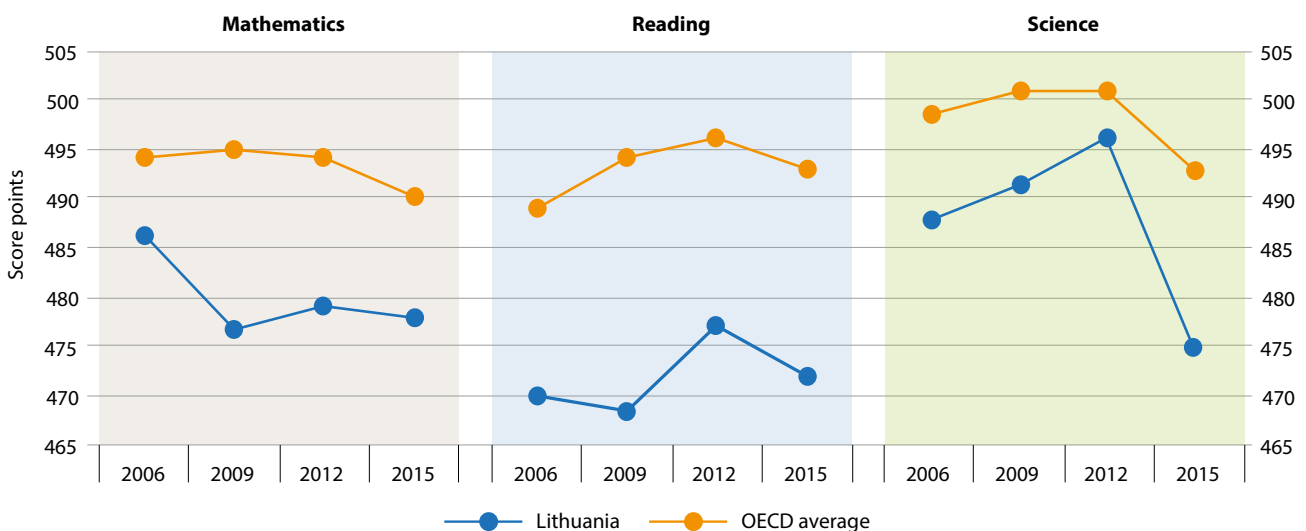
ment commences at grade two and continues through to the end of compulsory schooling. The assessments provide a wealth of information about students' performance in key subjects and school climate that is made available to teachers at the student and class level, and benchmarked against national norms, for instructional purposes. In addition, assessment results are available to school leaders, parents and others. They are reported at the school level, benchmarked against national and municipal averages, and adjusted for student characteristics, for school management and improvement.

Teacher training and school leadership selection policies do not make student assessments and their use a priority. There is wide scope for improvement in the use of Lithuania's well-developed assessment resources, including expanded use by school leaders and teachers for the purpose of improving school management and instructional practices, and by authorities outside of schools who are responsible for external quality assurance.

### INCREASING THE EFFICIENCY OF THE SCHOOL NETWORK

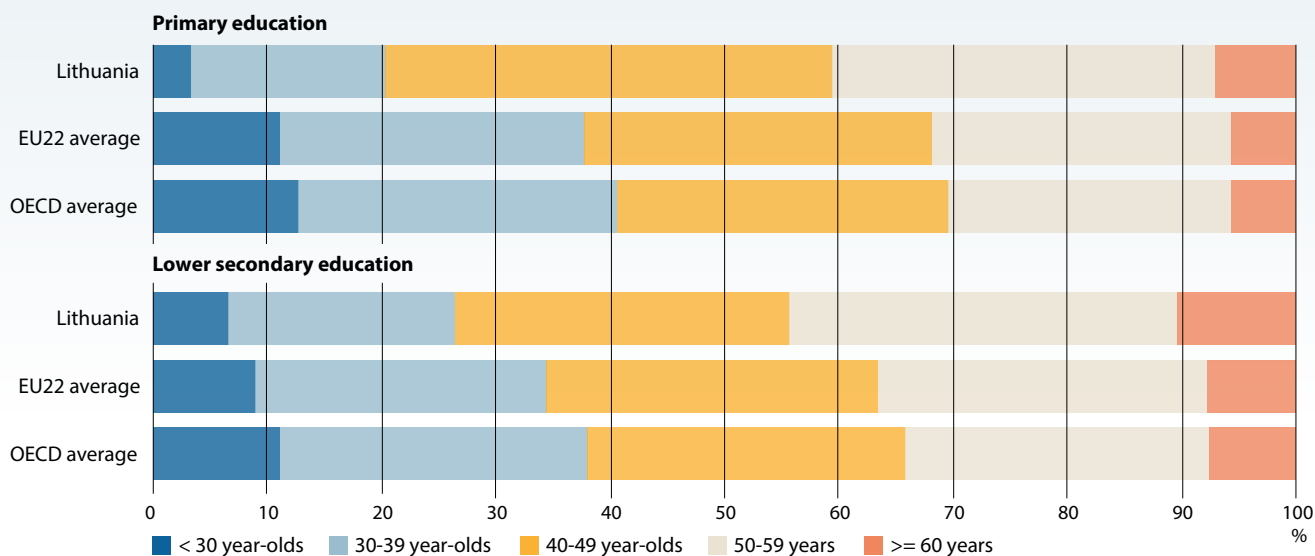
Swiftly declining school-aged cohorts have led to small class sizes and low student-teacher ratios, and put the nation's school network under great pressure for consolidation. Consolidation is important, both to achieve greater efficiency, and to ensure that students are provided with a high-quality education. The OECD School Resources Review for Lithuania provided a detailed analysis of school funding mechanisms and specific policy recommendations.

PISA trends in mathematics, science and reading achievement, 2006-2015



Source: OECD (2017), *Education in Lithuania*, Reviews of National Policies for Education, <http://dx.doi.org/10.1787/9789264281486-en>

## Age distribution of teachers (2014)



Source: OECD (2017), *Education in Lithuania*, Reviews of National Policies for Education, <http://dx.doi.org/10.1787/9789264281486-en>

## OECD RECOMMENDATIONS FOR PRIMARY AND LOWER SECONDARY EDUCATION

**Expand in-school instructional time** through a longer instructional year, by starting compulsory schooling at age six (rather than age seven), or both.

Improve support for learning in rural schools. **Consider targeted teacher quality initiatives (e.g. wage premia) and added learning support and enrichment in rural schools**, e.g. before and after school, and during holidays.

**The low performance of boys**, especially in reading, should likewise be the focus of targeted interventions.

**Take forward recent OECD teacher workforce policy recommendations, including:**

- Manage the current oversupply of teachers while making teaching more attractive to the most qualified young people (especially in key areas of shortage) to join the profession. Develop strategies for reallocating, redeploying and retiring teachers who will be affected by school consolidation.
- Secure funding in the short term to help attract and retain new talent into teaching; and raise teacher salaries considerably in the long term to make teaching more attractive for talented young people.
- Create a more coherent teacher career pathway that rewards teaching excellence and allows teachers to diversify their career pathways.
- Ensure that new teachers can work in a well-supported environment and receive frequent feedback and mentoring in early

stages of their career, and diversify and clarify the range of roles that should be taken on by teachers at different qualification levels.

**Build consensus about good teaching, and strengthen system capacity to support teacher policy:**

- Expand and consolidate staffing within the Ministry that strengthens its capacity to inform and lead teacher policy discussions.
- Develop an analytic staff that can make use of the data resources available to the Ministry, and serve as a knowledge broker linking it to education research in the international research community.
- Strengthen the policy-informing capacity of the nation's university and NGO-based education research community.

**Streamline the national assessment framework** that the nation's schools are asked to administer. Lithuania has established effective universal participation in a criterion-referenced national assessment in grades 4, 6, and 8. It should now conclude its use of the National Survey of Student Achievement, incorporating into its assessment system those components of the National Survey, such as teacher and student questionnaires, that provide information judged to be valuable by teachers, school heads, and other stakeholders. This would create a less burdensome and costly assessment framework, while preserving useful information.

**Support the use of assessment results:**

- Ensure assessment use is part of the nation's teacher competency framework, initial teacher training curriculum, and continuing professional development.



- Make capacity to use assessments in managing schools part of the school leader profile and selection process.
  - Evaluate whether the lower secondary Test of Basic Education Learning Achievements, which sets no standards with respect to proficiency and generates no performance incentives, is an effective use of school resources, and whether options for small performance incentives for test-takers are advisable.
  - Ensure that the National Agency for School Evaluation uses assessment results in school monitoring, and consider the use of performance-based prioritisation for external school quality assurance reviews.
- Follow through on implementation of the OECD School Resources Review (2016) for Lithuania's recommendations:**
- Avoid introducing a universal class basket funding scheme. A universal class basket scheme could help smaller schools, but would weaken the incentives to organise schooling efficiently and to compete for students. This would presumably result in smaller class size on average. This trade-off should be evaluated thoroughly. It will be essential in evaluating the impact of the experimental methodology of the class basket to consider how effectively this addresses the challenges for small, rural schools and, importantly, what the full cost implications would be if this is introduced system-wide.
  - Consider alternative measures to address funding challenges at the school level. Fiscal pressure on schools could be relieved by taking into account cost differences due to teacher composition. Cost differences could be smoothly incorporated into the funding formula by assigning different weights for categories of schools with a high, average or low salary cost index.
  - More effectively address equity within the funding formula. Inequality of opportunity related to social disadvantage appears to be overlooked in the funding policies. As one part of a more comprehensive approach it can be a useful measure to improve the education of less socio-economically advantaged students as well as students of language minorities. The possibility of assigning larger weights to socio-economically disadvantaged students in the funding formula should be considered.
  - Regularly evaluate the costs and adequacy of funding. More reliable and detailed evidence should be gathered on the costs and adequacy of funding in general, and on specific topics, e.g. small schools, national minority schools, the education of students with special needs and equity problems related to social disadvantages.
  - Promote efficiency in municipal funding of school maintenance. More attention should be devoted to improving efficiency in the allocation and use of school maintenance costs. Regular evaluation of resource use and the promotion of best practices in allocating municipal funding would be useful. Greater oversight of investments is required to ensure a more efficient and effective use of public funds.
- Evaluate the pilot class basket methodology in depth, and seek better targeted alternatives to it.**



## Upper secondary education

**Lithuania has achieved an especially high level of participation and attainment in upper secondary education. Projections based on current patterns suggest that more than nine in ten of today's young Lithuanians will complete their upper secondary education over their lifetime, a level well above the OECD average.**

Upper secondary vocational education has struggled to increase its attractiveness to learners, and to provide them with an education and training that leads to strong labour market outcomes. Upper secondary general education in Lithuania has been effective in permitting its participants to continue their studies at the nation's tertiary institutions. While the Ministry of Education and Science and its expert advisory bodies aim to develop a comprehensive and competency-focused upper secondary education, the *matura* examination, a high-stakes school leaving and higher education entry examination, creates incentives for teachers and students to focus principally on tested subjects within the upper secondary general education curriculum, and on the accumulation rather than application of knowledge. Moreover, with one examination at the end of secondary studies – and none of

consequence prior – schools find it challenging to create steady and consistent incentives for learning across the entire course of the secondary studies.

### IMPROVING THE QUALITY AND ATTRACTIVENESS OF VOCATIONAL EDUCATION

The Ministry of Education and Science has set national policy targets that call for increased enrolment in upper secondary vocational education – to 33% by 2017, and 35% by 2022 – and expanded work-based learning, including apprenticeships.

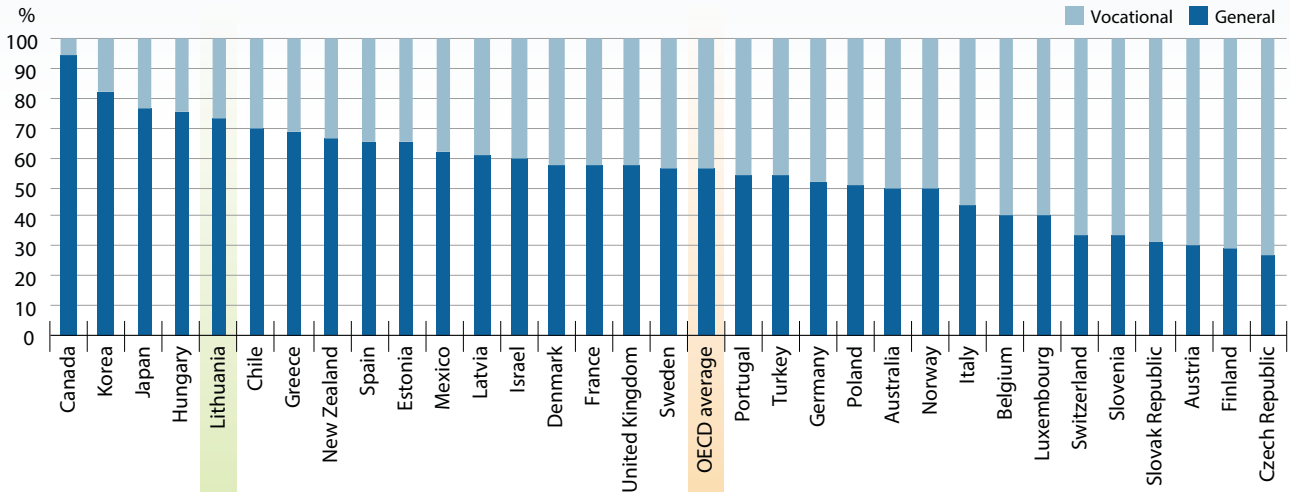
Comprehensive efforts are underway to increase VET attractiveness, including changes to governance of VET schools that will strengthen community engagement and



business collaboration; improvements to the vocational training workforce through continued professional education; large-scale investments in a national network of sectoral practical training centres that provide state-of-the-art facilities for vocational training; improved information about labour market outcomes through a

new human resources information system; and efforts to clarify the legal basis of apprenticeships and provide employer subsidies, so employers might create more apprenticeship opportunities. Early evidence suggests little headway in increasing the attractiveness of VET to students or employers.

**Enrolment of students in upper secondary education, by programme orientation (2014)**



Note: Countries are ranked in descending order.

Source: OECD (2017), *Education in Lithuania*, Reviews of National Policies for Education, <http://dx.doi.org/10.1787/9789264281486-en>



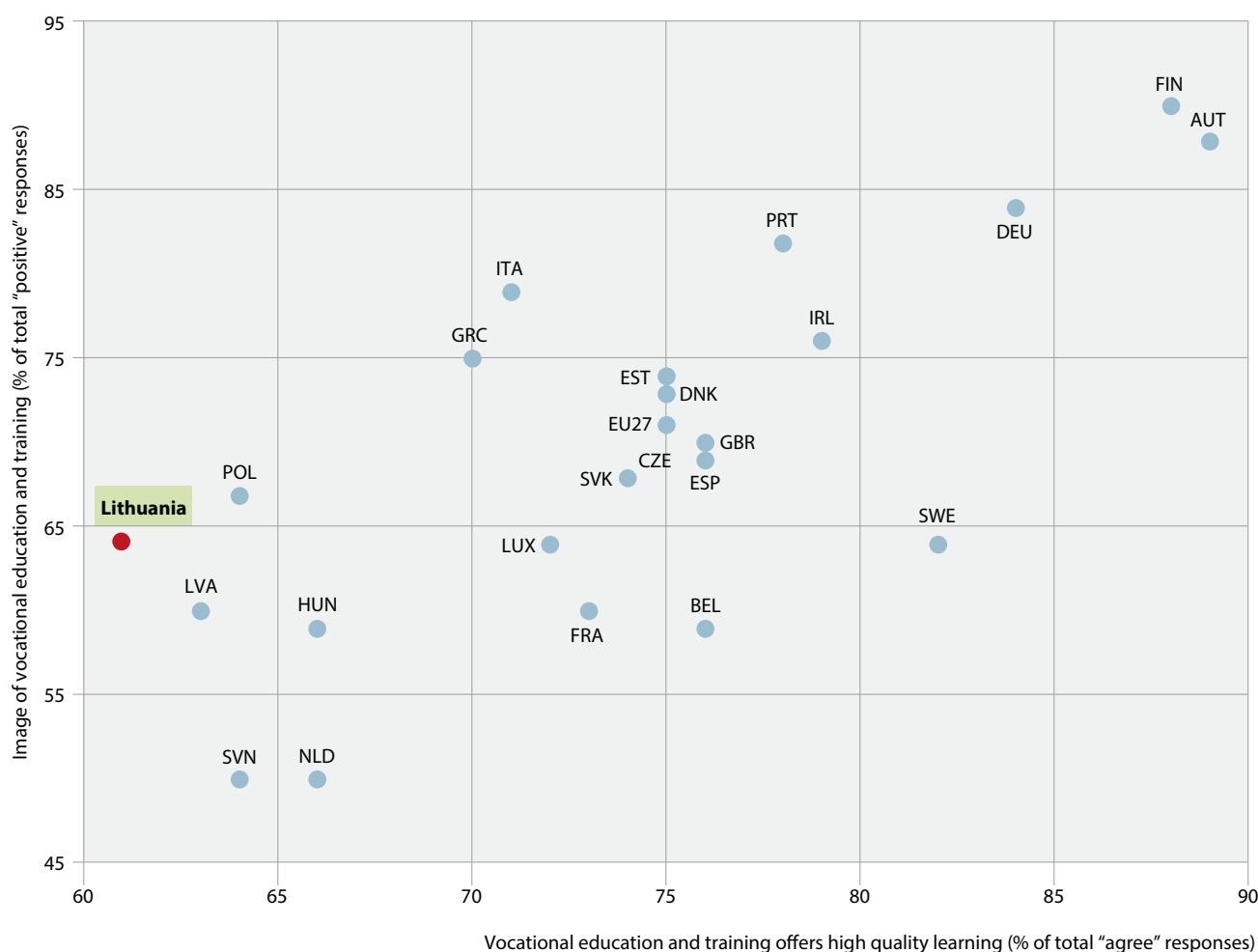
## ACHIEVING THE INTENDED CURRICULUM IN UPPER SECONDARY GENERAL EDUCATION

*Matura* examinations are the most influential feature of upper secondary education in Lithuania, as they determine the higher education institution and programmes to which students may gain entry, and prospects for publicly funded study. In meetings with the review team, students emphasised its importance – suggesting that the role of upper secondary “is to prepare for *matura*.” Students allocate their time and attention to the subjects in which they will take *matura* examination. Families frequently invest in private tutoring to prepare students for *matura* examinations. The *matura* examinations appear to create, in most instances, incentives that are at odds with the stated goal of providing a competency-oriented education. Further, policy makers and educators recognise that *matura* examinations focus the effort,

attention, and investment of learners disproportionately at the end of studies, while the preceding years of study – such as grades 9 and 10 in the gymnasium – are weakly incentivised.

Concern with the impact of the *matura* examinations on the upper secondary curriculum has prompted MoES to initiate the *matura* project, an optional assessment that would be included in the secondary school leaving certificate and count as the equivalent of a school-level *matura* examination. Students would be required to plan, implement, and present a project and to be assessed on this work by their teacher and an independent assessment board of subject professionals. It is hoped that this project-based learning would encourage not only the development of subject knowledge, but wider competencies including creativity, analytical critical thinking and communication skills.

### Perceived quality and image of vocational education and training



Source: European Commission (2011), “Attitudes towards vocational education and training”, Special Eurobarometer 369, [http://ec.europa.eu/public\\_opinion/archives/ebs/ebs\\_369\\_en.pdf](http://ec.europa.eu/public_opinion/archives/ebs/ebs_369_en.pdf).



## OECD RECOMMENDATIONS FOR UPPER SECONDARY EDUCATION

**Implement the newly authorised human resources monitoring system**, and use it to provide evidence of VET benefits to prospective students.

**Raise school capacity and incentives for apprenticeship training**, and clarify the scope of employer incentives for the creation of apprenticeship contracts. Specifically:

- Make work experience a prerequisite for entry into vocational teaching, and adopt policies that support ongoing movement between workplace and teaching as the principal means of continuing professional development. Review teacher compensation, advancement, and retirement policies to support career circulation between school and work.
- Consider a modification of the student basket funding methodology for vocational schools that recognises and rewards work-based instruction of vocational students.

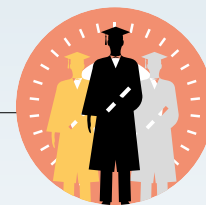
**Ensure that sectoral practical training centres are financially sustainable, and improve the accessibility of the centres** through a system of student support that meets living costs, is easily accessible to all eligible students, and is well-publicised through web resources and school-based advising.

**Improve opportunities for upper secondary vocational students to make full use of the pathway to tertiary education** through focused efforts to raise the quality of general education available to secondary vocational students.

**Monitor the *matura* project initiative, and consider alternatives to it, including:**

- **Moderated marking of classroom-based work** to provide stronger incentives for students to invest earlier and more comprehensively in the secondary curriculum, joining this to *matura* examination results in establishing the student's competitive score assigned for higher education entry.
- **Use of the 10th grade national assessment examination** as a component of higher education admission process – in conjunction with the *matura* examinations.
- **Implement teacher-led assessment redesign.** Extend the model followed by foreign language teachers across all subjects examined in the *matura*, with teacher-led assessment redesign that is competency-focused and supported by training in marking, reoriented classroom practices, and instructional materials aligned to the newly redesigned assessment. This could be linked to changes in the nation's teacher competency framework, to the reform of teacher training programmes, and to the rejuvenation of the teaching workforce, creating durable changes in teaching and learning.





## Tertiary education

**Lithuania has achieved an especially high level of participation in tertiary education, and its graduates, on average, experience labour market outcomes typical of OECD member countries. This is accomplished with modest levels of per pupil spending, by institutions that operate with substantial autonomy, and within a system of transparent funding driven by student demand. However, the tertiary sector now faces serious challenges. Lithuania’s tertiary institutions are too numerous and small to achieve the levels of efficiency and quality that the nation needs. The university system has not reached a level of satisfactory performance in research and development, and the wider tertiary system has not substantially benefitted from international mobility among students and researchers. In the long run – after addressing the urgent and important question of system scale and organisation – policy makers should turn their attention to overlooked questions of equity in access, resourcing and attainment within their tertiary system.**

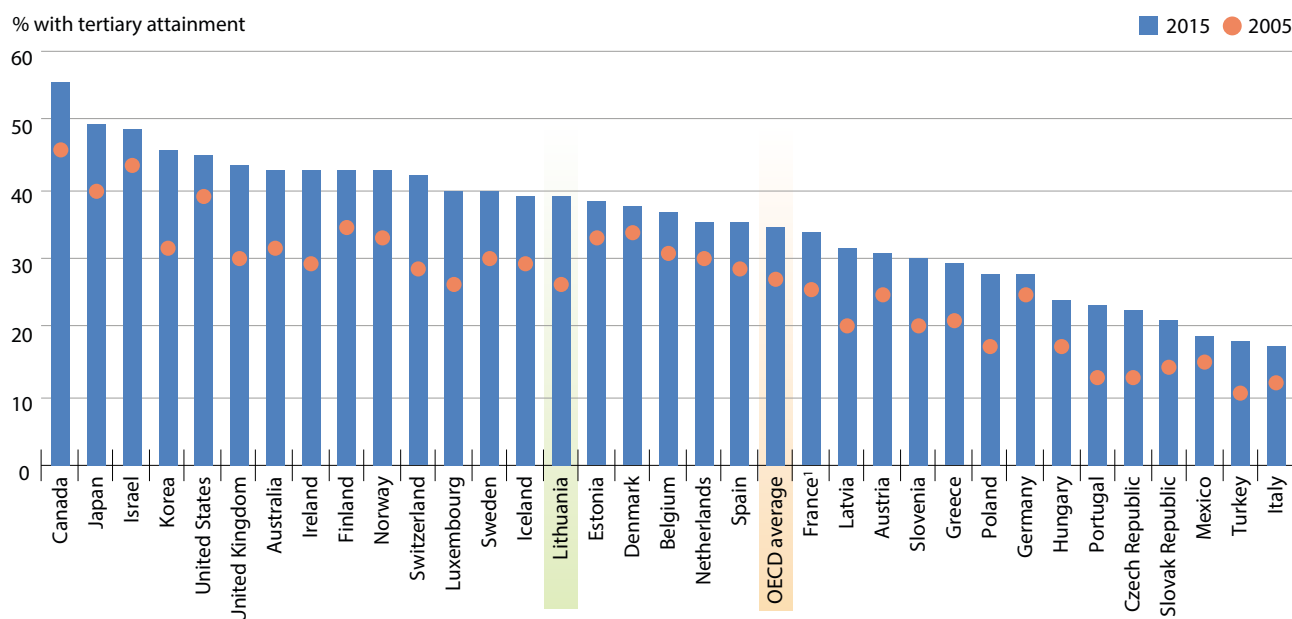
### CONSOLIDATING TERTIARY INSTITUTIONS FOR EFFICIENCY AND EQUITY

Lithuania’s severe demographic pressures create three very serious challenges for its system of tertiary education. Between 2010 and 2014 tertiary enrolments fell by 32%, and forecasts produced by government analysts predict that five of the nation’s universities will have no entering students by 2020. Falling student numbers result in declines in educational efficiency as student/teacher ratios fall and facilities are underused. Declining enrolments threaten the quality of student programmes as course offerings and instructor numbers decline. Falling student numbers exacerbate a pre-existing problem of scale

facing Lithuanian public university institutions, which are numerous (14) and small. The configuration of public universities and public sector research organisations has made it difficult for Lithuania to achieve the critical mass of researchers, facilities, and research infrastructure needed to effectively perform research at an international level.

The importance of consolidating and scaling tertiary provision has been often discussed in Lithuanian education policy, and it has been the focus of numerous external reviews of the nation’s public research system. Owing to the legal independence of public universities from the Ministry of Education and Science, only their founder,

**Trends in tertiary educational attainment among 25-64 year-olds, 2005 and 2015**



Note: 1. Year of reference 2014

2. Countries are ranked in descending order.

Source: OECD (2017), *Education in Lithuania*, Reviews of National Policies for Education, <http://dx.doi.org/10.1787/9789264281486-en>

the Lithuanian Parliament (*Seimas*), may merge or close institutions. Or, institutions may choose to voluntarily seek mergers or closure. As a result, achieving consolidation has proven difficult. However, comprehensive consolidation is urgently needed.

### IMPROVE THE RECRUITMENT OF FOREIGN STUDENTS AND RESEARCHERS – BALANCING ATTRACTIVENESS AND QUALITY IN INTERNATIONALISATION

Lithuanian society and government are deeply concerned with population decline in general and “brain drain” in particular. Internationalisation in tertiary education – specifically, attracting foreign researchers and students – holds the promise of mitigating this brain drain, strengthening the research and innovation capacity of the country, and offsetting, in part, falling numbers of Lithuanian students.

Colleges and universities have significantly increased their efforts to increase the enrolment of students from outside Lithuania, both through the development of staff responsible for contacting and recruitment and the creation of study programmes in foreign languages. Foreign student numbers have begun to rise in recent years, and student origins have shown increased diversification. Public universities have also aimed to attract researchers to Lithuania, though with limited success. An estimated 2% of Lithuanian researchers hold foreign citizenship – as compared to 12% in Estonia, and 21%-31% in Nordic higher

education systems. To ensure that foreign students are provided high quality programmes that are well adapted to their needs, safeguards are needed. And, conversely, to assist universities in achieving greater success in recruiting foreign researchers, further supports from national authorities are needed.

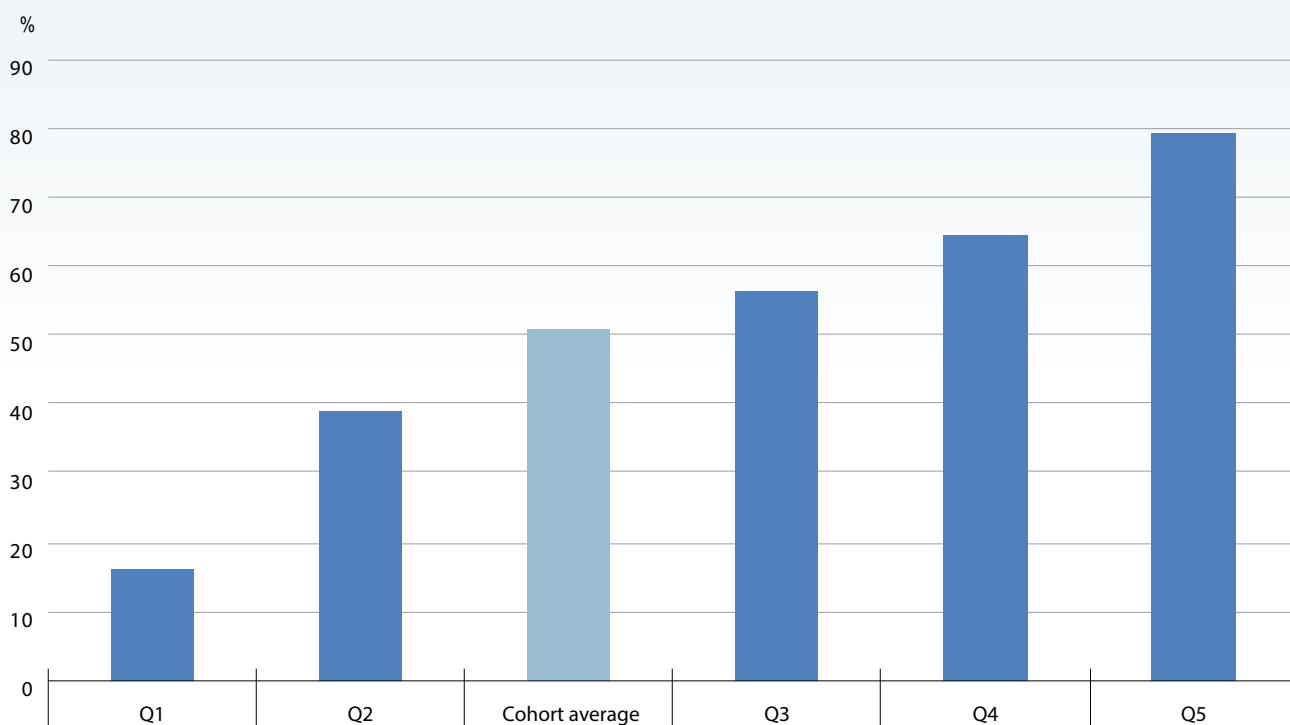
### MONITORING AND SUPPORTING EQUITY IN TERTIARY EDUCATION

Lithuania has achieved an especially high rate of tertiary attainment for its young adults. However, it has not done so equitably. Among households in the lowest income quintile, only 16% have completed tertiary education – while among households in the highest income quintile, 80% have done so. Lithuania does not monitor key populations with respect to participation and achievement in tertiary education. It has no policy targets, and it has no policies that focus specifically on mitigating inequalities in tertiary education. Rather, it has policies that risk widening inequities in tertiary education.

If Lithuanian policy makers wish to provide all citizens with equitable opportunities to reap the benefits of tertiary education, they should monitor how key student populations are faring in entering and completing tertiary studies, and in their post-schooling outcomes. Monitoring should be linked to policy targets, and these targets should be backed by policy tools that support students and institutions in achieving more equitable outcomes.

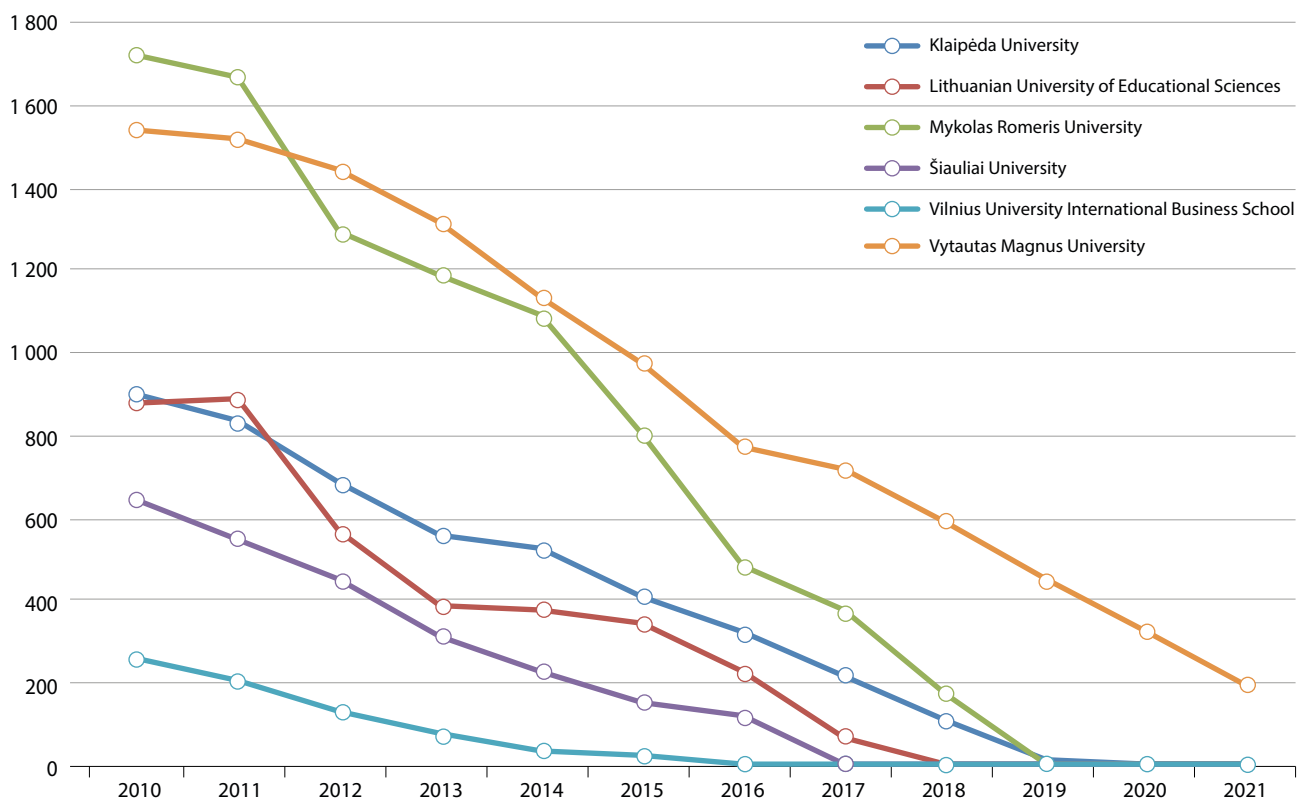


Percentage of 25-34 year-olds with tertiary attainment, by household income quintile (2014)



Source: Provided by the Ministry of Education and Science of Lithuania; calculations based upon data from Statistics Lithuania.

Forecast number of entrants, selected universities (2010-2021)



Source: Forecast provided by MOSTA (Research and Higher Education Monitoring and Analysis Centre, Lithuania).

## OECD RECOMMENDATIONS FOR TERTIARY EDUCATION

**Adopt a flexible, open, and pragmatic approach to consolidation.** Give consideration to the full range of consolidation options available to the nation – not only consolidation among public universities, but also opportunities for consolidation among universities and colleges, universities and research centres, and among all three, as well as changes to the status of higher education institutions, such as conversion of some small universities with a low research profile into colleges.

**Approach institutional consolidation as a first step in a long-term process.**

- a. **Help strengthen strategic institutional management, so higher education institutions can take full advantage of the opportunities that consolidation provides.** Strategic management capabilities are required if higher education institutions are to identify redundancies, new opportunities for research and teaching that are made possible by consolidation, and new ways of working with community and commercial partners.
- b. **Special attention and support should be given to redeployment, retraining, and redundancy options** for those who are affected by consolidation, since merging institutions in a way that achieves long-term cost efficiencies will result in reductions to staffing.

**Support complementary initiatives** to ensure university-based research reaches international levels. Resources should flow to departments and programmes that are performing research at high levels. Responsibility rests with public officials, who should ensure that funding for research is more fully linked to performance, and with higher education institutions, which need to fully exercise the leadership opportunities permitted them by reforms to funding and governance.

**Provide foreign students adequate information prior to enrolment, and assurance of quality after enrolment.** Provide prospective students with web-based information about institutional characteristics closely associated with quality, such as and graduation rates among the institution's students. The Centre for Quality Assessment in Higher Education should incorporate a focus on the quality of resources for foreign students as part of its quality assurance process by focusing on study programmes that are being offered in a foreign language.

**Align institutional incentives to recruit foreign students with national priorities** for research and innovation. Consider providing formula-based financial support to higher education institutions for the enrolment of foreign students in priority programmes of study.

**Provide a legal and tax framework that helps universities to attract foreign researchers.** Ensure there is a clear legal basis for universities to establish non-profit foundations that can recruit, compensate, and support researchers. Use tax policy or other incentives to encourage business-university collaboration that supports the recruitment of international researchers, and work carried out to international standards, on the model of the Center for Excellence in Finance and Research.

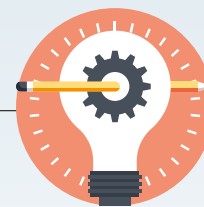
**Develop a tertiary education information management system** that has the capacity to monitor the social profile of students taking the state *matura* examination, the profile of students obtaining publicly-funded (and self-paid) seats, and the profiles of those commencing and completing first cycle (bachelor) courses.

**Report annually on the higher education continuation rate for secondary vocational students,** identifying the proportion of students who qualify for tertiary entry, the share who begin tertiary studies, and the share who complete. Identify suitable policy targets or benchmarks – using past performance and a peer comparison group of nations that have secondary VET programmes that permit flexible continuation to binary tertiary systems with well-developed colleges or universities of applied science.

**Monitor which students are completing their studies and which are not, and provide the Ministry, the Quality Assurance Agency, and Research and Higher Education Monitoring and Analysis Centre (MOSTA) with this information.** Compare progression and completion among social scholarship recipients to that of students who are not in receipt of formula-based support, and monitor to assure that they are succeeding in their studies at rates that are broadly comparable to those of other student populations.

**Revise student support to align with equity targets.** Social scholarships are now available to a small proportion (4%) of tertiary students. Widen their scope by linking them more broadly to family income, school characteristics, or community profile.

**Evaluate institutional funding policy** to ensure that students in like programmes receive comparable and appropriate instructional support, and monitor differences in instructional spending accordingly.



## Steering the system to higher levels of performance

**Lithuania's education system has achieved a broad scale of provision delivered by education institutions that are authorised to operate with a broad scope of autonomy. However, to help the nation meet its wider social and economic needs, education policy makers and stakeholders should place special emphasis on raising educational quality. Lithuania would benefit from an education system that performs at higher levels than at present, developing the skills of its young adults to the level of higher-performing peers in other countries; training innovative and skilled professionals for working life; and carrying out research to international standards. Raising performance is best understood not as a separate issue within each sector of education, but a challenge that requires a strategic approach – comprised of four considerations – that is adopted at all levels of education.**

As a first step towards improvement, expectations of performance should be clarified and raised. Lithuania needs a shared vision of good schools and good teaching, high quality vocational education, and successful college and university institutions - and for this vision to be embedded in guiding policy documents, and rooted in the thinking of practitioners. Currently, this vision, in some instances, is absent, unclear, or not formulated in ways that can raise performance. As Lithuanian authorities renew their *State Education Strategy* and develop policy and guidance documents – ranging from their Teacher

Competency Framework to proposals for the consolidation of the nation's higher education system – they should ensure that each articulates a vision of high performance that is widely understood, and provides a basis for guiding policy and practice. This is the foundation on which resources can be aligned in support of improvement, and performance can be monitored to assure quality.

Improving education and training in Lithuania will require that *resources be mobilised in support of improvement*. For example, a shared vision of high quality teaching and



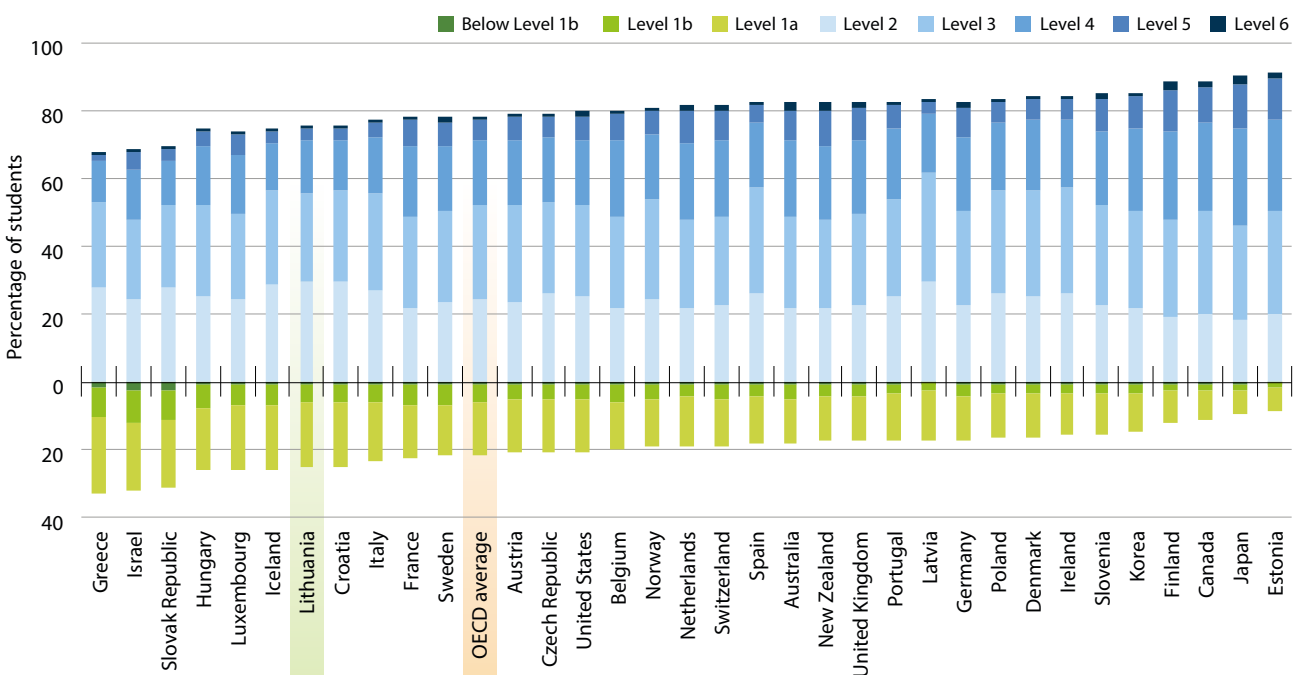
how to prepare teachers needs to be joined up to funding. Attracting high quality entrants to teaching programmes and retaining them in the teaching profession requires that salaries continue to be raised. Raising student achievement should be supported through expanded instructional time. In Lithuania, mobilising resources for improvements in educational performance will principally require that national authorities exercise leadership in the *reallocation* of resources – especially through the consolidation of existing education institutions. Immediate responsibility for the consolidation of schools and universities rests with municipalities and the Lithuanian parliament, the *Seimas*, respectively, rather than the Ministry of Education and Science (MoES). However, MoES has an essential role to play in supporting their work.

Raising the performance of Lithuania's schools, colleges, and universities should be supported by improvements to the *monitoring of their performance and the assurance of their quality*. There have been important accomplishments in the development of the capabilities in the nation's education system. However, four challenges must be addressed if monitoring and quality assurance are to lead to performance improvements. First, efforts must focus on the use of assessment results by teachers and school leaders who are not fully exploiting the potential of assessments to improve classroom practice and school leadership. Second, monitoring and reporting

across the entire education system need to attend more systematically to disadvantaged learners or students at risk of receiving poor provision. Third, quality assurance systems need to be better integrated with pupil assessment and monitoring systems. And additionally, Lithuanian authorities should ensure that the nation's incipient human resources monitoring system is fully implemented, and then put to use in support of policy.

Lithuania has engaged in large-scale reform of its education and training institutions since the reestablishment of independence. The *Seimas* has adopted legislation decentralising to local government responsibility for the organisation and supervision of schooling, created transparent enrolment-based models for funding schools and higher education systems, and provided school heads and higher education leaders with responsibility for the management of their institutions. However, the capacity of education institutions for self-management is not yet consistently and fully developed. Municipal and national authorities responsible for supervision and guidance of a decentralised system of education sometimes lack the capacities they need to meet their steering responsibilities. Sustained improvement in the performance of the education and training system will require, therefore, that Lithuania systematically focus on the *capacities of its institutions*, and commit as a matter of policy to ensuring that they have capacities sufficient to meet their responsibilities.

Science performance levels in PISA 2015



Note: The seven levels of proficiency are based upon PISA 2015 Science scale scores, and range from Level 1b (261 or below) to Level 6 (708 and above). Level 2 is considered a baseline level of proficiency all young adults should attain to take pursue further learning opportunities and participate fully in the social, economic and civic life.

Source: OECD (2017), *Education in Lithuania*, Reviews of National Policies for Education, <http://dx.doi.org/10.1787/9789264281486-en>

### OECD RECOMMENDATIONS

As a means to comprehensively raise the level of performance for all students, the government and other education stakeholders across the country are encouraged to work towards:

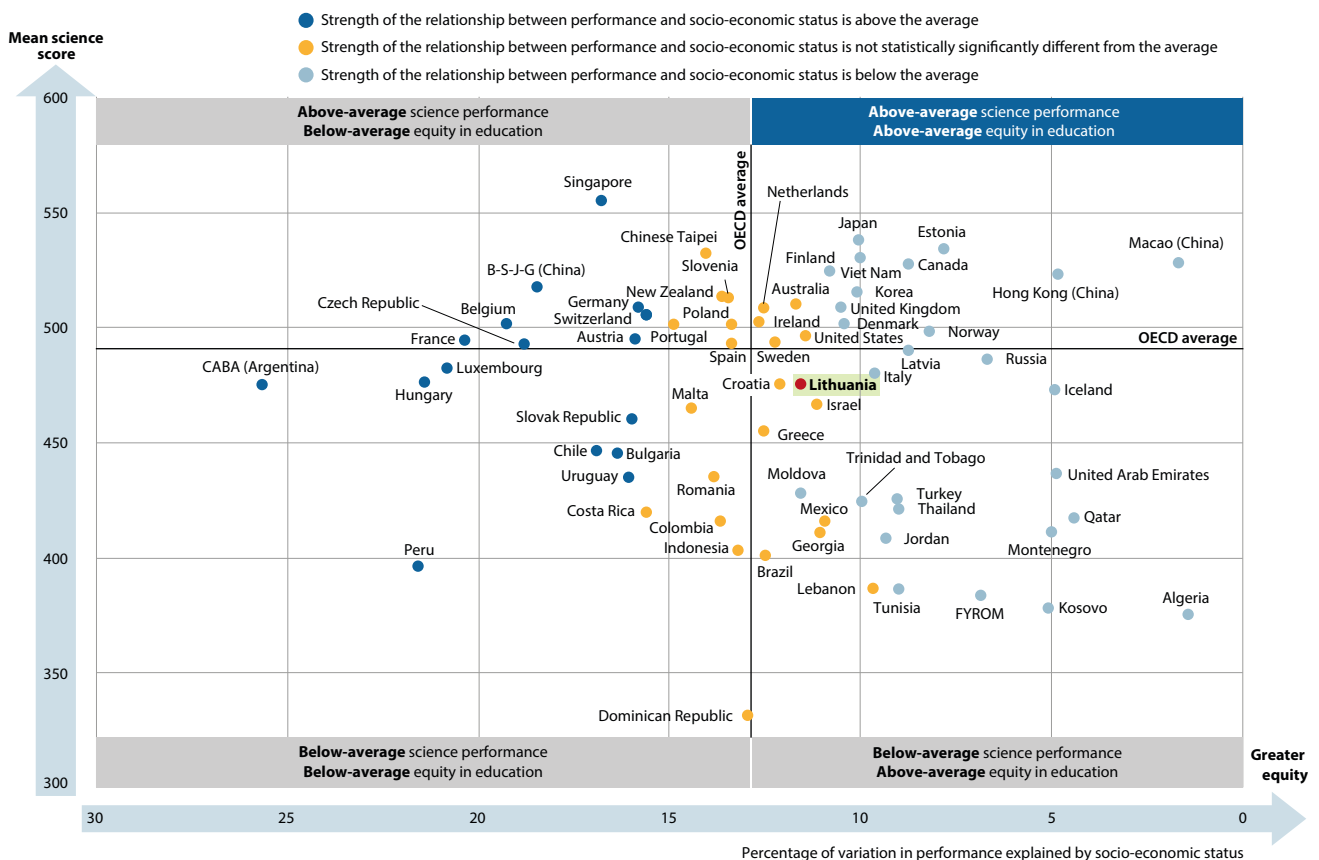
**Clarifying and raising expectations of performance** – by students, teachers, school leaders, and researchers – across the education system. Productive discussions, those that become embedded in guiding policy documents and the thinking of practitioners, need to identify a shared vision of good schools and good teaching, high quality vocational education, and successful college and university institutions.

**Aligning resources in support of raised performance expectations.** If students are to learn at higher levels, resources must support this – including expanded learning time and a strengthened teacher workforce. University research funding must be still more closely linked to quality. Improvements will often require new or continued consolidation of universities and schools, which are sometimes poorly organised, to support efficient resource use or high levels of quality.

**Strengthening performance monitoring and ensuring quality.** Improvement requires careful attention to performance. Lithuania has established data systems and school assessments, but has not fully used these to improve teaching or leadership, or to assure quality. Linking existing education information systems to labour market information and making better use of assessment information are needed to raise performance, and greater attention to presently overlooked disadvantaged students is needed.

**Building institutional capacity to achieve high performance.** National education policy makers in Lithuania sometimes lack the organisational and analytical capacity to play the convening and steering role for which they are responsible. Likewise, education institutions sometimes lack the capacity for self-management they need in a system providing wide autonomy. Developing the institutional capacity of each should be a priority of policy.

**Relationship between performance and socio-economic status in science in PISA 2015**

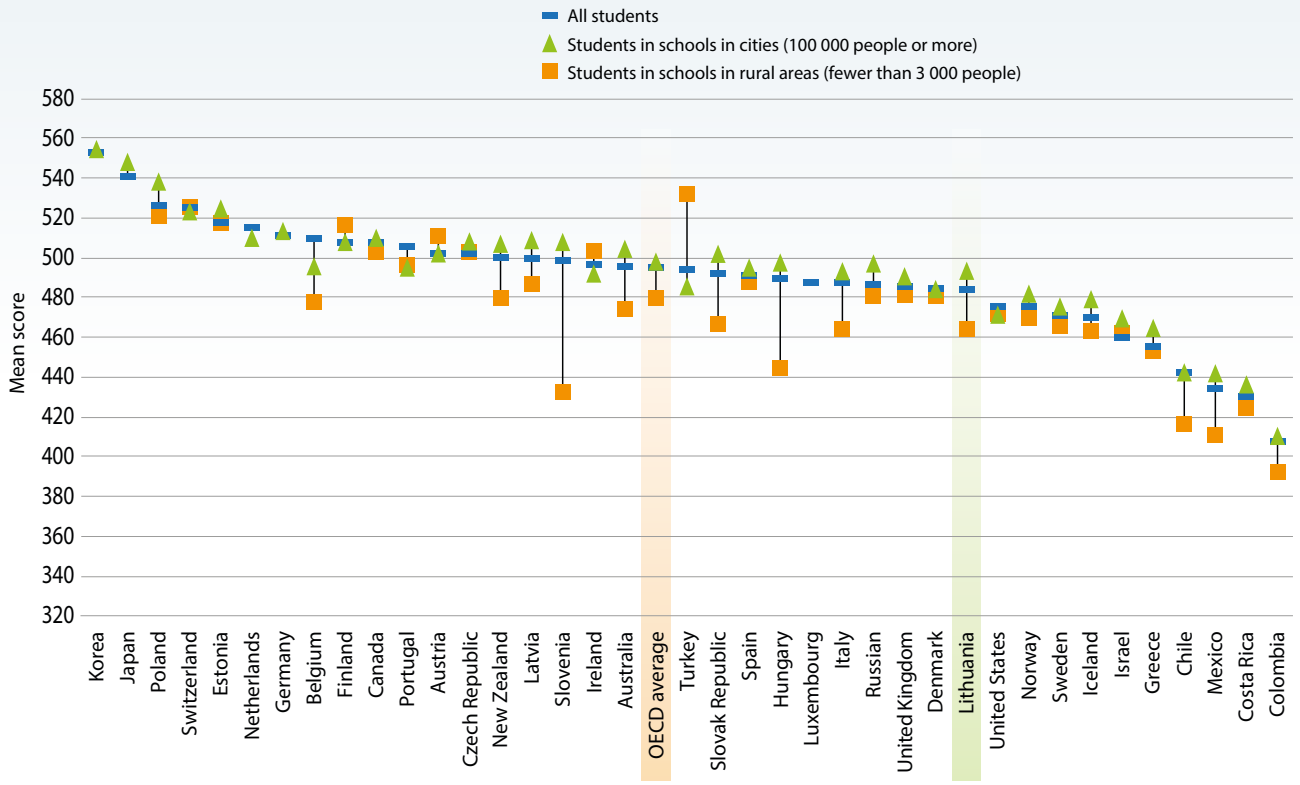


Note: Only countries and economies with available data are shown.

Source: OECD (2017), *Education in Lithuania*, Reviews of National Policies for Education, <http://dx.doi.org/10.1787/9789264281486-en>



Mean mathematics performance in PISA 2012, by school location



Note: Countries are ranked in order of mean performance of all students, after accounting for socio-economic status.

Source: OECD (2013), PISA 2012 Results: Excellence through Equity (Volume II): Giving Every Student the Chance to Succeed, Figure II.3.3, <http://dx.doi.org/10.1787/9789264201132-en>.  
 OECD (2017), Education in Lithuania, Reviews of National Policies for Education, <http://dx.doi.org/10.1787/9789264281486-en>



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The OECD Directorate for Education and Skills helps countries to identify and develop the knowledge and skills that drive better jobs and better lives, generate prosperity and promote social inclusion. We encourage countries to compare their experiences and learn from each other, and we accompany them in the difficult process of policy implementation.

Our global metrics help policy makers to see what is possible in education and to set meaningful aspirations in terms of measurable goals achieved by the world's education leaders. Our PISA surveys show how much school systems vary in their progress towards equipping learners with the critical thinking and creative problem-solving skills that are so crucial at a time when the kinds of things that are easy to teach and easy to test are also easiest to digitise, automate and outsource. Through TALIS, we seek to strengthen the teaching profession and to devise more innovative learning environments with the 21st-century pedagogies that will shape 21st-century learners.

Our in-depth policy analysis and advice help countries understand how their national education system is faring in comparison to others, and learn what policies and practices have made a difference for strong performers and successful reformers in education. We also engage in national policy dialogues to help policy makers raise awareness for the need of reform and build agreement among stakeholders. Recognising that educational improvement is not just about new ideas and legislation, we support policy makers through the journey of change to improve teaching and learning outcomes for all.

Our aspiration is to help every learner, every parent, every teacher and every policy maker see that only the sky is the limit to improving education – and that improving education is the key to a better and fairer society.



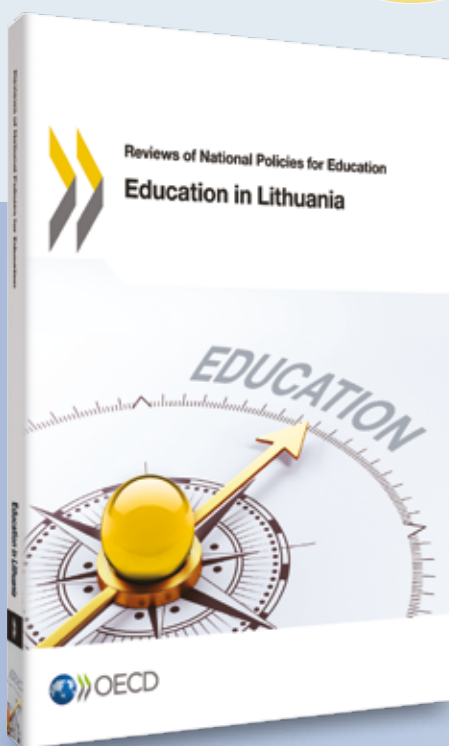
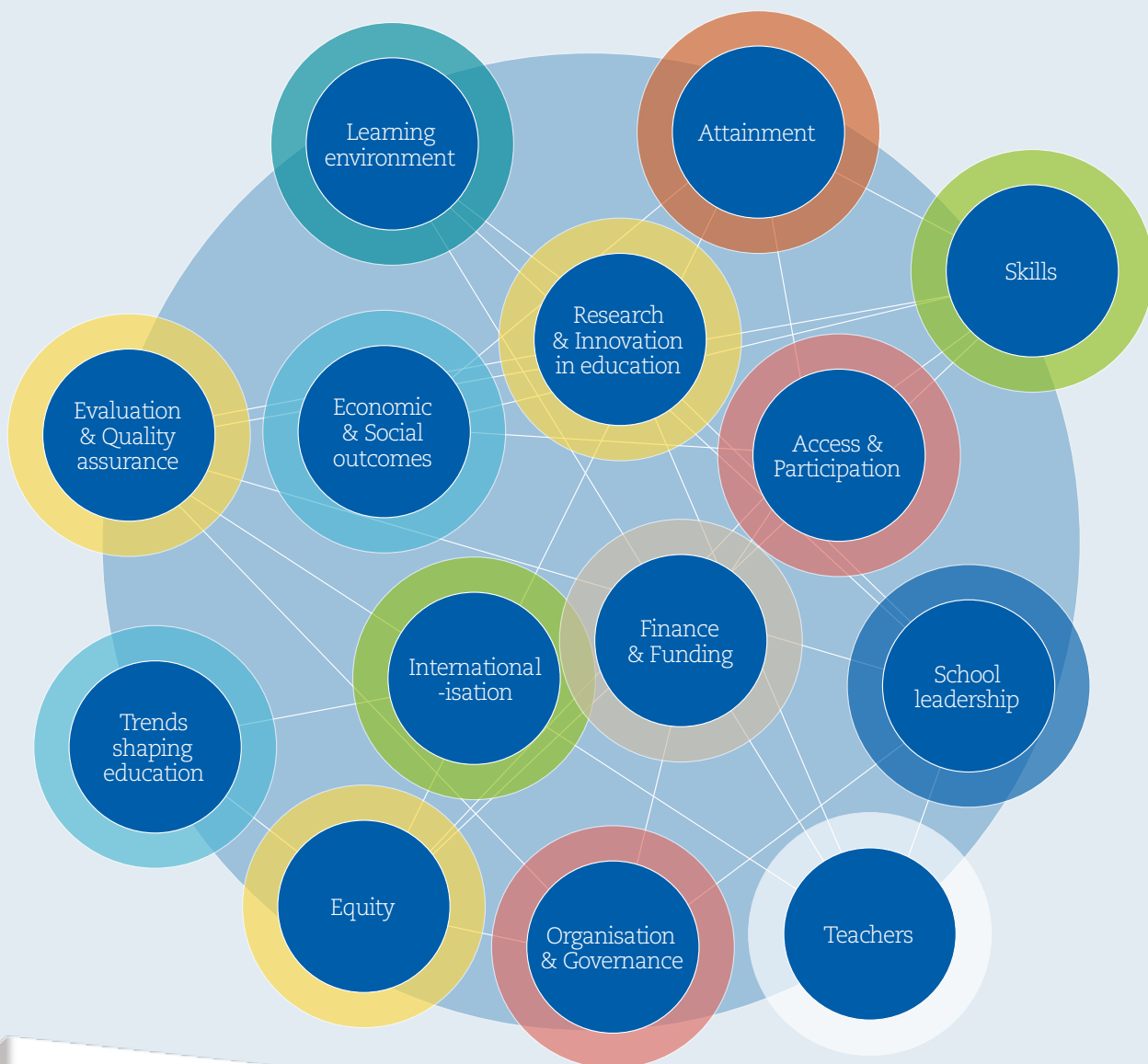
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