



REPUBLIC OF ESTONIA
MINISTRY OF EDUCATION
AND RESEARCH

Important activities in the 2019/2020 academic year



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Preschool education

A new curriculum is being prepared, and every child must receive high-quality preschool education

A new curriculum for preschools is being prepared. The current curriculum was completed eleven years ago, so it is time to review both the aims and content of preschool education.

The primary purpose of preschool education is to ensure the readiness and smooth transition of children from home to preschool and from preschool to school. The contemporary approach to learning is based on the thesis that every child is able to learn but does so in a different way, which requires consideration of the pace and characteristics of the children. This is the only way to provide the children with the support they need in a timely manner, be it a speech therapist, health care professional or some other professional.

The new curriculum for preschool education seeks to further define the common learning content to create a common information space between preschools, homes and the child's future school. A broader discussion of the working version of the curriculum will begin in October and should be completed by the end of the year.

A new law on preschool education is also under preparation.

There were 618 preschools in Estonia in the 2018/2019 academic year, including 129 preschool childcare institutions operating with general education schools. As of 2018, 93.8% of children between the

The state has continued the programme "Professional Estonian-language teacher in every Russian-language preschool group" so that every child has equal opportunities in preschool education.

ages of 4 and 7 were enrolled in preschool education. Enrolment in preschool education has remained at the same level in recent years.

Russian-speaking preschool groups receive more Estonian-speaking teachers

The state has continued the programme "Professional Estonian-language teacher in every Russian-language preschool group" so that every child has equal opportunities in preschool education.

Last year, 10 Tallinn and 11 Ida-Virumaa County preschools were selected to participate in the programme, with a total of 53 groups participating in the programme. With the help of state support, local governments were able to pay for the labor and training costs and teaching materials of 53 Estonian-speaking teachers.

This year, in cooperation with Tallinn University, the participation of 30 new groups in the project has been supported.

The popularity of the preschool teaching profession is on the rise, as are salaries

This year, session-based studies for preschool teachers was the most popular curriculum among the entrants at the University of Tartu, with 8.1 candidates applying for every place.

In recent years, the focus has been on the wages of preschool teachers and this year the goal is to reach 90% of the minimum salary of a teacher in a general education school, or EUR 1,125 per month, and to ensure that the salary of a preschool teacher with a master's degree is at least 100% of the minimum salary of a teacher of a general education school, or EUR 1250 per month. To encourage salary increases for preschool teachers, state subsidies have been paid to local governments since September 2017.

In 2014, the average salary of a preschool teacher was EUR 736 in Harju County and EUR 584 in Ida-Viru County, and in 2019, EUR 1,147 and EUR 1,161 respectively. As a result of the state support measure and contributions from local governments, the salaries of preschool teachers across Estonia have increased and equalised. The average salary of a preschool teacher in Estonia this spring was EUR 1,145.

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External assessment

Graduates can take an internationally recognized English test for free

As of this academic year, all upper secondary school graduates with a very good command of English can take a free internationally recognized advanced (C1) English test and obtain an international certificate of proficiency. It facilitates further education for young people planning to have a career that requires a very good command of a foreign language and those that want to study abroad.

This autumn, the Cambridge C1 Advanced session will be open to school-leavers from every school across Estonia. The prerequisite for registration for the exam is the passing of the CEPT Preliminary Test with a grade of C. The test consists of listening and reading sections and lasts approximately 30 minutes, with the candidate receiving the result immediately after taking the test.

Taking an international test free of charge is an excellent opportunity for students whose language proficiency is higher than B2 in the state examination and who for some reason have not been able to do so. Further information can be found on the [SA Innove website](#).

Riigikogu discusses draft for abolition of basic school final examinations

Proposals for legislative changes will be submitted to the Riigikogu in the autumn, affecting the conditions for graduation from basic school and the system for external assessment of learning outcomes.

According to the plan, each school can decide in the future whether a student has acquired basic education. Completion of basic school will continue to require the completion of a national curriculum, but schools will have the right to set their own requirements for the graduation from basic school according to the specifics of the school. This means that students no longer need to take the final examinations to graduate from basic school.

Once the changes take effect, the burden of testing will be more evenly distributed. In the final grade of basic school, all students will sit an Estonian language examination and Estonian as a second language examination in order to assess their proficiency in Estonian. A test will also be conducted to assess knowledge of the Estonian Constitution, public policy and the functioning of society, as well as the rights and obligations of citizens, but it will be guaranteed that the state testing does not coincide with tests for entering upper secondary school.

Completion of basic school will continue to require the completion of a national curriculum, but schools will have the right to set their own requirements for the graduation from basic school according to the specifics of the school. This means that students no longer need to take the final examinations to graduate from basic school.

Neither the language examination nor the civic education test will constitute legal prerequisites for the completion of basic school in the future.

The civic education test supports the basic school's task of helping students become active and responsible members of the community and society, ready to make decisions and take responsibility. Civic competence helps basic school graduates make informed choices, since young people, from the age of 16, have the right to vote in local council elections. At the same time, the amendment to the Citizenship Act stipulates that students that do not have Estonian citizenship are deemed to have fulfilled the requirements for applying for Estonian citizenship by successfully passing the language examination and the civic education test. It creates more flexible opportunities for students to fulfil, within basic education, the conditions for acquisition of citizenship.

Mathematics and science subjects, as well as social subjects and foreign languages, will also be regularly tested during basic school in order to better monitor student development.

At the end of the year, the results of PISA 2018 will be made public

The results of the PISA survey will be made public on 3 December. The survey was conducted in 2018 and this time the emphasis was on the assessment of reading skills. Financial literacy was also assessed during testing, and these results will be made public in the first half of 2020.

In Estonia, 5,316 students from 231 schools participated in the PISA 2018 testing, with a total of 80 countries participating.



General education, school network

Currently there are 530 general education schools in Estonia. Of these, 52 are basic schools with grades 1–6; 307 are basic schools with grades 1–9; 157 are full-cycle schools (grades 1–12) or upper secondary schools (10–12); 26 schools are upper secondary schools, including 16 state upper secondary schools. There are 14 adult upper secondary schools in Estonia, but adult general education is provided in each county.

In the previous academic year, there were 74 small (fewer than 100 students) upper secondary levels (grades 10–12) and 43 of these with fewer than 50 students. There were 18 very small basic schools with fewer than 30 students. There were 31 schools with grades 1–6 with fewer than 30 students.

In the last academic year (2018/2019), the largest school in Estonia was Tallinn Linnamäe Russian Lyceum with 1,486 students, while the smallest was Misso School with only three students.

The number of students will continue to grow in the years to come. In September, an estimated 153,000 students enroll in full-time general education schools. Nearly 14,500 students will go to first grade this year.

The number of students may reach 159,000 by 2024. However, this remains far below the number of students in the late 1990s, when more than 215,000 students attended general education schools. However, the changes vary by region and student numbers are increasing primarily in Tartumaa and Harjumaa Counties. Although the overall number of students is growing, the number

of children going to first grade is close to reaching its peak and will begin to decrease slightly in the coming years. It is estimated that the number of students in general education in 2030 will be the same as today.

The Ministry, in cooperation with the Bullying-Free Education Movement, aims to ensure that programmes to prevent and address bullying reach every school and preschool.

Prevention of school bullying is at the forefront; special attention is paid to Russian-speaking schools and vocational training institutions

The Ministry, in cooperation with the Bullying-Free Education Movement, aims to ensure that programmes to prevent and address bullying reach every school and preschool. In 2018, approximately 60% of general education schools and 80% of pre-school institutions implemented programmes that focus on safety and values.

The state continues to support the dissemination of safety and values programmes in educational institutions and has significantly increased funding for its partners. In 2018 the subsidy amount was EUR 367,000, while this year it is EUR 517,000. Special attention is being paid to Russian-language schools and vocational training institutions.

The Ministry has a cooperation body of seven institutions that have joined the Bullying-Free Education Concept, which includes the University of Tartu Centre for Ethics, the NGO Estonian Union for Child Welfare, Bullying-Free School Foundation, NGO TORE (Support Students' Circle in Estonia), Minutes of Silence, National Institute for Health Development (VEPA Behavioral Skills Game Program) and Estonian Student Representative Union with the project "Tolerant School".

The bullying-free education concept has been developed with institutions in the field, setting out insights and approaches that ensure a safe school path for every student. The concept is being updated. In addition, an action plan for up to three years is being drawn up to facilitate the evaluation of the situation, the choice between programmes and, where possible, the evaluation of the quality of programme implementation.

The Minister of Education and Research has also appointed members of the bullying-free education movement as strategic partners of the Ministry for the next three years, which will provide them with the security of at least three years of fixed funding. This, in turn, allows them to focus on meeting longer-term goals.

In September, a new state upper secondary school opened in Kohtla-Järve.

Public debate on reduction in amount of homework continues

For the sake of students' well-being, the ministry will continue its public debate on reducing homework. Homework is one of the most widely used learning methods in Estonian schools, but it should be ensured that it is meaningful and supports the achievement of learning outcomes.

Small amounts of homework do play an important role that varies with age. For school levels I–II, homework should rather be about developing learning skills and work habits, and later about improving learning outcomes. The problem is excessive volumes of homework that do not have a clear aim.

The volume of homework is not positively related to learning results; rather, those who do poorly do more homework. Thus, homework plays a compensatory role. Various surveys show that the maximum amount of useful time spent on homework is between 4 and 7 hours per week.

Only one in five 15-year-olds in Estonia spends less than 7 hours per week on homework.

Assessment of the volume of homework is also related to school satisfaction in both 8th and 11th grades. Those with too much homework also have below-average satisfaction.

The concept and action plan for developing talented students is under preparation

The Estonian education system offers many opportunities to diversify and adapt the education of talented students. In order to systematically discover and develop talent, with a clear focus and smart allocation of resources, it is necessary to agree within the education system on what is meant by talent. The Ministry of Education and Research is preparing the concept and action plan for the development of talented students, with partners from universities.

The Ministry has also completed an analysis of talent in Estonian education, which is available on the Ministry's website (in Estonian).

Kohtla-Järve State Upper Secondary School starts operating

In September, a new state upper secondary school opened in Kohtla-Järve. The school has 300 places and can accommodate about 400 students. A brand new school building has been completed.

Former students of Kohtla-Järve upper secondary schools and graduates of basic schools will start studying at the State Upper Secondary School. The city of Kohtla-Järve has reorganised the former upper secondary schools into basic schools.

Kohtla-Järve Upper Secondary School will offer in-depth education in Estonian to Russian-speaking students. In addition, study modules will be offered in the fields of engineering, digital systems, sciences, performing arts and media and communication. The school's ambition is to become a centre for the advancement of the life for the whole region.

In total, 16 state upper secondary schools will operate in Estonia during the new academic year. Preparations are under way for the opening of Tabasalu Upper Secondary School and Saaremaa Upper Secondary School in 2021, and for the opening of state upper secondary schools in Saue municipality and Rakvere in 2022. After 2022, state upper secondary schools will be opened in Rae municipality, Tallinn and Narva.

Adult general education in Läänemaa continues at Haapsalu Vocational Education Centre

From 1 September, adult students in Läänemaa County will be able to continue their basic and secondary education at the Haapsalu Vocational Education Centre. Following the decision of the Haapsalu City Government, the Adult Upper Secondary School will cease to exist as a separate institution and the Haapsalu Vocational Education Centre will take over the provision of general education for adults.

The teaching is based on the upper secondary school and basic school curriculum, and students of the General Education Department of the Vocational Education Centre will receive a basic school or upper secondary school graduation certificate.

If desired, it is possible to combine studies with vocational training and, together with graduation from basic or upper secondary school, acquire vocational skills as well as a occupational certificate.

Construction of Tallinn Music and Ballet School to begin

In 2020, the construction of the Tallinn Music and Ballet School at 59 Pärnu Road will begin. The Tallinn Music and Ballet School, which will operate as a vocational school and upper secondary school, will be established by merging the current Tallinn Music High School, Georg Ots Tallinn Music School and Tallinn Ballet School. The school will start operating in the new building on 1 September 2022.

The state supports local governments in modernising school network with more than EUR 100 million

In the new academic year, basic schools in Aseri, Jõgeva, Paide, Juuru, Viljandi, Tabivere, Põlva and Tartu can start their studies in modern conditions.

The government has approved a two-round investment plan for the measure of modernising the basic school network, totaling EUR 100.8 million. In the first round, the state supported 22 local government projects, and 12 projects in the second round. As a result of the two rounds, approximately 104,812 square metres of basic school space will be modernised and school area will be reduced by approximately 91,000 square metres.

Local governments receive state support for adaptation of schools for SEN students

An investment plan for adaptation the basic school network for students with special needs will be submitted to the government for approval in September. Four proposals have been submitted to the evaluation committee: Reconstruction

In the new academic year, basic schools in Aseri, Jõgeva, Paide, Juuru, Viljandi, Tabivere, Põlva and Tartu can start their studies in modern conditions.

of Tartu Kroonuaia School, construction of the new Võru Järve School building, construction of Pärnu Päikese School and reconstruction of Tallinn Tondi Basic School. The total volume of the projects is EUR 24.9 million and the area to be modernised is approximately 9,700 square metres.

Operation of two schools for SEN students transferred from the state to the local government

In order to organize the education of pupils with special educational needs more efficiently, the state is transferring the operation of two schools to local government. From the new academic year, the formerly state owned Vaeküla School and Lahmuse School will be local government schools.

Vaeküla School will be renamed Näpi School, and will also be the centre of expertise for special needs education in Rakvere municipality. Lahmuse School has been run by the Põhja-Sakala municipality since September, which plans to further integrate the school into the educational life of the region.

In the new academic year, there are 15 schools for SEN students.

Development program for education advisers of local governments to be launched

In cooperation with the Ministry of Education and Research, the Association of Estonian Cities and Municipalities and Foundation Innove, a training programme for local government education leaders will be launched to increase the competence of local education leaders in strategic education planning, change management and support for education leaders. 35 educational officials applied for the programme, of whom 18 were selected.

In cooperation with the Ministry of Finance, a local government leader development programme for deputy mayors and deputy rural municipality mayors is being prepared in the social and education field. The pilot project of the Association of Estonian Cities and Municipalities on the modernisation of teachers' work and salary organisation in local government continues.



Teachers

In the previous academic year, a total of 15,465 teachers worked in 12,852 positions in general education schools. This means that a significant proportion of teachers continue to work part-time. The number of both teachers and teaching positions has increased compared to the past.

A first analysis of the career path and mobility of teachers in general education schools shows that teachers are loyal to their profession, with an average of 13% of teachers leaving each year.

40% of teachers that have left school return to work in schools again.

In the last five years, more new teachers have taken up their posts than those that have left.

The popularity of the teaching profession grew by a quarter over the year

The number of applications for admission to the universities of Tallinn and Tartu shows a marked increase in interest in studies to become a teacher. Compared to the previous year, there are even 24% more candidates for different fields of education in the universities of Tartu and Tallinn.

In 2013, only 13.7% of teachers felt that their profession was valued in society, but within five years this figure had risen to 26.4%

Legislative amendment gives teachers greater right to ensure safety at school

An amendment to the Basic Schools and Upper Secondary Schools Act will enter into force in September, allowing general education schools to apply sanctions against a student when there is reasonable suspicion that a student is in possession of prohibited objects or substances.

Sanctions may include seizing the objects or substances, inspecting the student and things in his or her use, such as the locker, or inspecting the student and his or her clothing through observation and physical contact.

In case the student is suspected to have prohibited objects or substances, the student may be inspected against his or her will if he or she has been informed beforehand of the reason for the inspection and a voluntary release of the object or substance has been suggested but this has not been done.

Updated professional standards to apply

The Professional Council for Education confirmed new professional standards in the spring, with a greater focus on inclusive education and digital pedagogy.

The new professional standards for teachers, senior teachers and master teachers will apply from 1 January 2020.

Professional standards are the basis for planning teachers' formal education and continuing education. Applying for a teacher's qualification gives

teachers the opportunity to analyse their work and competencies, and supports both the teacher and the school leader in monitoring and supporting professional development.

National report for TALIS (Teaching and Learning International Survey) is published

In September, the national report for the OECD's Teaching and Learning International Survey TALIS 2018 will be published in Estonian. Four regional seminars will be held in autumn in Tallinn, Tartu, Pärnu and Narva to present the findings. Seminars with school leaders and teachers will discuss how to use survey findings to enhance learning and teaching.

The TALIS 2018 results show that teachers see their profession being increasingly valued in society. In 2013, only 13.7% of teachers felt that their profession was valued in society, but within five years this figure had risen to 26.4% (the OECD average is 25.8%). At the same time, the number of people entering the teaching profession over the last five years is significantly higher, having increased by 39%.

Both teachers and school leaders believe that there is a good relationship between students and teachers in our schools. More and more teachers are promoting the belief that they can do well at school among students and help them value learning. Behavioral problems are better managed and teacher self-efficacy has increased compared to 2013.

The average grade 7–9 teacher in Estonia is 49 years old and 54% of Estonian teachers are over 50 years old. Estonian school leaders are on average 53 years old and 21% of our school leaders are over 60. Ensuring the succession of teachers and school leaders, increasing the attractiveness of the teaching profession, and providing support for teachers remain a major challenge.

The first part of the survey, "Teachers and School Leaders as Lifelong Learners," was published this summer. The second part of the international report, "Teachers and School Leaders as Valued Professionals," will be published in March 2020, with the national report following in April.

Estonia has participated in the TALIS survey in 2008, 2013 and 2018. The results provide a comprehensive overview of learning and teaching at the tertiary level and allow for international comparison. In 2018, 48 countries participated in the survey.

First-time teachers and support specialists receive early career support

In the beginning of the academic year, early career support subsidies will continue to be paid to first-time teachers and support specialists that are employed in a general education or vocational school. Support subsidy can be applied after the completion of professional studies and commencement of work.

The amount of the support subsidy is EUR 12,783 in 2019, payable in three installments over a period of three years. Upon receipt of the support subsidy, the teacher or support specialist undertakes to work as required for five years.

From September 2020, the support subsidy will be paid as a lump sum.

Teachers and support specialists can apply for national education scholarships

The competition for national education scholarships will be announced for the second time in September. Applications may be submitted by teachers and support professionals from pre-school, basic, upper secondary and vocational schools. The scholarship is up to EUR 11,000 and is intended for use in 2020 with a maximum duration of six months.

The scholarship is awarded on the basis of priority topics in the field of education, the applicant's career and readiness to develop his or her professional competence, compliance with qualification requirements and the applicability of the scholarship to the wider education system.

The scholarship can be used for a variety of applications, such as participation in studies and internships, preparation of study materials, training abroad, etc.



Digital focus

In advancement of the digital focus, the ministry considers a multi-faceted approach to be important, which means focusing on infrastructure upgrades, equipment acquisition, creation of educational resources and development of users' digital competences.

School IT infrastructure, an integral part of Estonia's e-government, to be taken to a new level

By 2022, the IT infrastructure in every Estonian general education and vocational school will be renovated. EUR 8.27 million will be provided to support upgrades to schools' intranet.

The internal networks of 154 schools have been renovated in the last three years, while the infrastructure of the remaining schools will be renovated in the next four years.

The renovation is divided into two phases: a total of 164 general education and vocational school networks will be established or updated this and next year, and the remaining Estonian school networks will be renovated in 2021–2022.

The support is a continuation of the modernisation of the IT infrastructure of schools that started in 2016. The updates are being carried out in cooperation with the Information Technology Foundation for Education.

Range of digital textbooks for basic school classes expands

Last year's digital textbook pilot programme for basic schools was successful and well received in

schools. In the new academic year, the range of digital textbooks will increase further. The Opiq and Foxcademy platforms, which include textbooks from publishers such as Koolibri, Avita, Kännimees and JA Eesti, can be used for free.

One further innovation is that the digital textbooks can also be used by parents. All digital textbooks are in the [e-Schoolbag](#).

The widespread adoption of digital textbooks has resulted in a modern learning environment that allows for more individualized and flexible learning. Digital textbooks also make students' school bags lighter.

New education portal to bring together practical information of the field and national e-services

The educational portal [edu.ee](#) provides practical information on every level of education from preschool to adult education, as well as major news and events in the field. The portal brings together educational e-services: currently anyone can search by specialisation and educational institution (including hobby schools and in-service training institutions), while logged-in users can view their educational data and apply for needs-based education grants.

In addition to practical information on education- and youth-related issues, the portal provides forecasts of labour needs from the OSKA forecasting and monitoring system for labour and skills requirements for the next decade, sectoral surveys and job descriptions. Information from OSKA's

surveys and forecasts is useful to anyone who is making or planning to make choices regarding specialisations and careers.

The content of the portal is prepared in cooperation with the administrative agencies of the Ministry of Education and Research and the Unemployment Insurance Fund.

Support provided to start-ups in the Estonian education sector

A call for applications for start-ups in the Estonian education sector has been launched to support the development of new ideas and educational solutions. The ministry looks forward to the great interest from the private and third sector to create solutions both to today's challenges and to tomorrow's opportunities and needs. The maximum grant per project is EUR 30,000, and the call for proposals will be conducted by Foundation Innove.

IT education reaches every school, new joint projects launched

Last year, in cooperation with school managers, the digital infrastructure of the schools was upgraded with various digital and smart devices, the prerequisite of which was the availability of IT studies from the beginning of the academic year.

In the autumn, all of the Klass+ activities projects will be launched, in which at least three schools will collaborate to create and share innovative and modern educational resources, especially in the field of science. The next call for applications will be announced in the new year.

Focus on securing next generation of IT teachers

The IT Academy programme supports the training of informatics teachers at Tallinn University and the University of Tartu. More than 30 students have started their studies this autumn.

While it has been possible to become a teacher of mathematics and informatics at Tartu University for several years, this year the content of the subjects taught will be revised, and the Master's curriculum at Tallinn University has been completely updated.

Raising learning labs to excellence continues to make learning more practical. Studies for learners that live at a distance and work full-time are becoming more flexible, as opportunities for remote participation (video links, lecture follow-ups and regional practice centers) are being developed.

The IT Academy supports research by doctoral students in informatics didactics and awards a

Last year's digital textbook pilot programme for basic schools was successful and well received in schools. In the new academic year, the range of digital textbooks will increase further.

specialty scholarship of EUR 300 to the best Master's students.

The IT Academy is a cooperation programme between the Estonian state, universities, vocational schools and companies in the ICT sector to increase the quality and competitiveness of ICT vocational and higher education, to ensure the necessary human resources and to develop research in this field. The program is funded by the Ministry of Education and Research and overseen by the Information Technology Foundation for Education.

New IT optional courses offer opportunities for young people to create digital solutions

In the new academic year, several Estonian schools will start offering optional upper secondary informatics courses. The new subject syllabus gives upper secondary school students the opportunity to develop and apply IT skills in practice and based on their own interests. In groups of 4–6, students will look for digital solutions to real-life problems, with each student in the group having a role to play, such as programmer, designer, analyst, tester, project manager, etc.

The materials for the upper secondary informatics syllabus have been created by HITSA, Tallinn University, University of Tartu, Tallinn University of Technology in cooperation with teachers and students at ten pilot schools.

HarID educational identity solution completed

HarID is an identity solution that allows one user to sign in to multiple educational services, create an account for a minor that does not have an ID card, and manage user rights for employees under them. Until now, educational institutions lacked a unified solution for managing data and user accounts, the tools available did not meet all needs or were too complex.



Vocational education

As of the new academic year, formal vocational education is provided by 32 vocational schools and five state institutions of professional higher education.

There are approximately 23,000 students in vocational training. Admissions have been stable in recent years, while the average age of vocational students has risen. The number of learners aged 25 and over wishing to get an occupational qualification, learn a vocation or improve their employability has increased.

Vocational orientation studies extend from pilot schools to other vocational education institutions

Vocational orientation studies are a new type of preparatory formal education for vocational education, intended for those that do not yet know what to study after graduation or that need additional preparation for further education.

Three schools have participated in the vocational orientation curriculum pilot project over the past three years. Amendments to the Vocational Educational Institutions Act, which entered into force at the beginning of 2019, extended the right to vocational orientation studies to all vocational education institutions.

The vocational orientation curricula at Tartu Vocational Education Center, Vana-Vigala Technical and Service School, Räpina Horticultural School and Valga County Vocational Training Center have been registered in the Estonian Education Information

System. The curricula of Tartu Art School and Viljandi Vocational Training Center are awaiting approval.

In order to support the implementation of the new curriculum, guidance material has been prepared on Vocational orientation studies: for whom, why, how?, and in cooperation with the Ministry of Social Affairs, an open call for proposals for EEA and Norwegian grants is being prepared.

Revised vocational education standard makes completion of formal education more flexible

The Vocational Education Standard, which came into force this spring, makes the requirements for completing formal education more flexible. Under current arrangements, a vocational examination had to be taken in order to complete formal education and, if this was failed, a graduation certificate was not issued. The amendment gives students that have

Vocational orientation studies are a new type of preparatory formal education for vocational education, intended for those that do not yet know what to study after graduation or that need additional preparation for further education.

failed the vocational examination the opportunity to graduate if they successfully complete the school's final examination.

Another important change in the vocational education standard is that educational institutions may no longer implement three-month formal education curricula, as this format is appropriate for in-service training. Students in formal education must be given sufficient time to both acquire key competences and complete in-company practice, meaning that the minimum length of vocational education curricula is six months.

The Vocational Education Standard also specifies the requirements for the new vocational orientation studies.

Funding for vocational education institutions to take into account performance indicators

From 2020, the performance funding component will be implemented in vocational education funding. Performance funding is calculated for the achievement of performance indicators related to strategic objectives of national importance. There is a total of four performance indicators.

The quality of vocational education provision is assessed on the basis of two indicators: the proportion of students completing a vocational examination out of the total number of school graduates, and the proportion of students in apprenticeship training among the total number of students.

As an indicator of the performance of vocational education provision, the acquisition of vocational education during the standard period of study is considered. Graduation of formal education students from vocational secondary education is considered separately.

The share of graduates in employment, of students continuing education at the same level or at the next professional qualification or educational level of the total number of school graduates is taken as an indicator for supporting the development of society.

IT Academy vocational education pilot project is launched

The IT Academy's vocational education activities are popularising and developing vocational education in the field of IT. The purpose of launching the pilot program is to meet the needs of the labour market and to prepare one fifth of the graduates for further studies in STEM curricula at university. The project partners are Tallinn Polytechnic School,

Tartu Vocational Education Centre, Ida-Viru Vocational Education Centre and HITSA.

A joint vocational secondary education curriculum on software development (4 years) has been registered, which is available in both Estonian and Russian, and the first 120 students are enrolled this autumn. The new curriculum increased the volume of general education by teaching more mathematics as well as Estonian and English. The additional modules complement the acquisition of specialty knowledge and skills and key competences. In the future, students will be able to continue their studies at the higher education level more smoothly.

There is close co-operation with employers, who are involved in teaching, developing the learning content and providing internships. Teacher development is also supported and a number of continuing education opportunities are created. The needs-based creation and adaptation of learning resources are important.

Legislative change supports vocational training institutions in providing training to SEN students

On 1 September this year, the amendments to the Regulation on Conditions and Procedures for Studying in a Vocational Education Institutions for Students with Special Educational Needs entered into force. The amendments support vocational education institutions in organizing the learning of pupils with special educational needs and reduce the administrative burden of confirming or establishing a special educational need.

The definition of a student with special educational needs was also clarified. While the concept was previously based on a list of special needs, a definition is now being introduced that refers to purposeful support in the learning process.



Higher education

In the academic year of 2019/2020, higher education is provided by the total of 19 educational institutions, including six public universities, one private university, seven public and five private institutions of professional higher education.

As of 1 September, Lääne-Viru College has been merged with Tallinn University of Applied Sciences, with one campus being in Mõdriku near Rakvere. The Defense Forces' Joint Educational Institutions have been renamed the Defense Forces Academy.

Due to its negative accreditation result, the government has decided that Euroacademy will have the right to teach at tertiary level until 31 August 2020, and no new students will be accepted.

The number of students in higher education in Estonia continues to decrease, but more and more students continue their studies at Master's and Doctoral level. The decrease of the number of students in higher education is driven, on the one hand, by demographic changes (the number of 18-24-year-olds and their proportion of the total population is decreasing) and, on the other hand, changes in the choice of educational paths. There is a growing trend for students to take a break between completing upper secondary education and starting university or vocational education after a few years. This is also confirmed by the increase in the average age of students (and entrants) in the higher education and the increase in the share of adult learners. This year's enrolment numbers will be determined in November after the matriculation of the students and their entry into the Estonian Education Information System.

Students admitted to professional higher education from 2019/2020 academic year to be awarded a Bachelor's degree upon graduation.

The proportion of entrants and graduates in natural sciences and exact sciences has increased. More students are involved in short-term learning mobility in another country.

Revised Higher Education Code bring changes for students, academics and educational institutions

On 1 September, the new Higher Education Act (KHS), Tallinn University Act, Estonian University of Life Sciences Act, Estonian Academy of Music and Theatre Act and Estonian Academy of Arts Act entered into force. The revised Higher Education Code sets out more clearly the main tasks of the state and higher education institutions, as well as the rights and obligations of students. The new Higher Education Act contains less detailed prescriptions than before.

A major change for students is that the law no longer prohibits studies during academic leave and that, at the discretion of the school, it can be provided to students.

Students admitted to professional higher education from 2019/2020 academic year to be awarded a Bachelor's degree upon graduation. Students that started their studies before 1 September 2019, will still be awarded a diploma of professional higher education upon graduation.

At the beginning of this academic year, a new hall complex will be opened at the Estonian Academy of Music and Theatre, with a 480-seat concert hall and a 130-seat black box theatre.

According to the new law, the national student identification card will no longer be issued and the Association of Estonian Student Unions will stop issuing it. Student status can still be confirmed with an ISIC card and, in the absence of this, it is possible to obtain a document confirming studies from the institution of higher education in the future.

Cooperation between higher education institutions is supported by the simplification of joint curriculum requirements. In order to link universities and society more closely, non-university members will be involved in the governance of all universities.

The law also specifies the language of studies. Professional higher education, Bachelor's and Master's degree programmes are generally in Estonian. A higher education institution may only open a foreign language curriculum in cases justified by quality or labour requirements.

In higher education quality assessment, the overall assessment of curriculum groups is replaced by a thematic assessment focused on specific problems. The amendment significantly reduces the burden of assessments for large institutions of higher education, which provide education in many different fields.

It is the Minister, not the government, that will henceforth grant the right to provide education.

In the autumn, several changes concerning lecturers and researchers will enter into force both in the Higher Education Act and the Research and Development Organization Act (TAKS). Instead of the current nine academic staff positions, there will now be four. Intermediate grades are created as part of a career model at a higher education

institution. To better link teaching and research, there is no longer a distinction between teaching and research staff and the concept of academic staff is used. All academic staff members have the opportunity to reach tenure, be promoted and use a semester free of lectures.

From September, the TAKS amendment on applying for research grants also enters into force, whereby institutional and personal research grants will be combined into one research grant.

The modernisation of the Higher Education Code began in 2016, with proposals from students, universities, employers' and workers' organisations and ministries on what needed to be changed. The revision of the Higher Education Code did not change the basic principles of the higher education system, i.e. extensive autonomy of higher education institutions, three-level higher education, quality assessment principles, principles of free study, etc.

At the beginning of 2020, the Delta Centre of the University of Tartu will be completed, consisting of the university's IT-related study and research building and entrepreneurship building.

The hall of the Estonian Academy of Music and Theatre and Delta building of the University of Tartu will be completed

A total of seven research and education buildings are being constructed or refurbished under ASTRA, the universities and research institutions development program. At the beginning of this academic year, a new hall complex will be opened at the Estonian Academy of Music and Theatre, with a 480-seat concert hall and a 130-seat black box theatre.

At the beginning of 2020, the Delta Centre of the University of Tartu will be completed, consisting of the university's IT-related study and research building and entrepreneurship building. The construction and refurbishing is closely linked to the development of the content of research and higher education, such as supporting doctoral-level schools, internationalisation of higher education and research, updating of laboratories and equipment, cooperation in the field of business and improved field training opportunities.

Maximum student loan rate increases to EUR 2,500

In the 2019/2020 academic year, the maximum student loan rate per student per year has been increased from the current EUR 2,000 to EUR 2,500. The maximum student loan rate had remained at the same level for about ten years, during which the cost of living had risen considerably. Raising the loan rate will allow students to better cover the additional costs of education. At the same time, students still have the opportunity to take a student loan below the maximum rate, which is less than EUR 2,500 per school year.



Adult education

Since 2009, more than 10% of adults have participated in lifelong learning. Last year, 19.7% of adults aged between 25 and 64 participated in lifelong learning.

In the 2018/2019 academic year, there were 5,486 distance learners in general education, which is slightly more than a year ago. The share of adult vocational learners (aged 25 and over) increased in the 2018/2019 academic year compared with the previous year: In the 2017/2018 academic year, the share of learners aged 25 and over was 36.7%, while in 2018/2019 that figure rose to 39.6%.

The number of adult learners aged 30 and over in higher education fell from the 2011/2012 academic year, but picked up in recent years, amounting to 28.5% of the total university student population in 2018/2019.

Free training reaches 7,000 adults this year

In the second half of 2019, nearly 7,000 adults have the opportunity to pursue professional development through free training courses at vocational education institutions and institutions of professional higher education throughout Estonia. The courses are aimed at adults that are not qualified or whose skills need updating.

The courses have been selected in cooperation with schools, based on sectoral and regional training needs identified by the Estonian labour force and skills forecasting system OSKA. There is a wide variety of free training courses, with more

courses on construction, accommodation, catering and computer skills, as well as general competence development.

In line with OSKA's recommendations, free training will also begin at universities at the end of 2019, expanding lifelong learning opportunities to new target groups.

Number of participants in adult education increases

The number of participants in adult education courses in 2018 was almost 11% higher than in 2017. While in 2017, 373,034 people attended various courses for adults, in 2018 nearly 420,000 people attended. The exact number will be known by 1 October.

According to the Estonian Education Information System, there are over 1,100 adult education institutions in Estonia. Due to the varied landscape of the institutions and the varying levels of training, the need to assess their quality has become a priority.

The Ministry has involved the Estonian Higher Education and Vocational Education Quality Agency (EKKA) in the quality promotion activities of adult education. In the autumn, EKKA will start piloting the threshold-based quality assessment methodology to determine whether it would fit to be one quality assessment instrument that, on the one hand, supports customers for training in complying with the Adult Education Act and, on the other, provides assessment and feedback to

training institutions on quality principles. During the pilot phase, those who provide training for public money are primarily evaluated.

International adult skills survey PIAAC under preparation

The PIAAC pilot study will be conducted in Estonia in spring 2020. The main survey data collection is planned for 2021–2022. The Ministry is conducting the survey in cooperation with Statistics Estonia.

In 2011–2012, when Estonia first participated in the PIAAC survey, data were collected on nearly eight thousand people aged 16–65. The results of the survey showed that Estonian adults stand out positively in terms of functional reading and mathematical literacy. In both cases, Estonia's results were above the average of the participating countries. In the case of problem-solving skills in a technology-rich environment, the results of Estonian adults were below the average of the participating countries.

Last year, 19.7% of adults aged between 25 and 64 participated in lifelong learning.

PIAAC is an OECD Adult Skills Survey with nearly 40 countries participating in its first cycle. To compare the development of adult skills with the past decade, Estonia is participating in the second cycle of the PIAAC survey.

New OSKA reports are being prepared

In order to better match people's knowledge, skills and training offers to changes in the labour market and the needs of society, a coordination system for monitoring and forecasting labour demand and skills development, or OSKA, has been launched in Estonia. Through OSKA, it is possible to determine how many and what skills the labour market needs today and tomorrow, and what should be changed in today's education system and lifelong learning to meet future needs.

By 2020, OSKA will produce reports on labour and skills needs across all economic fields. To date, surveys have been completed in 16 fields. Next, in October, OSKA's surveys on cultural and creative activity, water and waste management and the environment will be published.

OSKA provides information on skills and labour needs for economic development over the next decade and helps shape curricula, develop a career guidance system and support the activities of institutions funding education and training systems. OSKA surveys are used to create labour market training orders at different educational levels and types of schools on the basis of activity or profession, as well as continuing and retraining.

Õpitund held for the first time during Adult Learner's Week

On 11 October, during Adult Learner's Week, the all-Estonian *Õpitund* (a Lesson) will be held for the first time. This is an appeal to all adults across Estonia: learn something new and exciting with your colleagues, friends or alone for self-development. *Õpitund* participants can register themselves on the ETKA Andras website www.andras.ee, and on the interactive map it is possible to see in what places in Estonia new knowledge and skills are acquired that day.



Language

The state is vigorously developing digital solutions for Estonian language learning, and an advanced e-learning course “Keeletee” has been completed

The state is vigorously developing digital solutions so that everyone can learn Estonian free of charge at any time, anywhere.

In mid-September an advanced B1 e-learning course, “Keeletee,” was launched for users (www.keeletee.ee). „Keeletee” “Keeletee” allows Russian and English learners to independently learn Estonian by offering reading, writing and text comprehension exercises. The e-course is free of charge, and advice and help can also be obtained from an Estonian language teacher.

Although the first chapters of “Keeletee” were launched in 2018, the course is now being finalised. “Keeletee” currently has over 2,000 users.

“Keeletee” is a continuation of the popular Estonian language course “Keeleklikk” (www.keeleklikk.ee), which allows individuals to learn Estonian at A1 and A2 levels for free. “Keeleklikk” has approximately 55,000 users.

New national programme “Estonian Language and Culture in the Digital Age 2019–2027” launched

The new programme plays an important role in ensuring the development and vitality of the Estonian language and culture in the digital space. The programme supports the implementation of the digital dimension in research and development

of the Estonian language and culture and encourages interdisciplinary cooperation. Public, private and third-sector institutions can apply for support under the programme.

With the support of the Estonian Language Technology Programme, machine translation, speech synthesis, speech recognition, etc. are being developed

The aim of the National Language Technology Programme (2018–2027) is to improve the quality of Estonian language technology applications and to implement them in as many areas as possible in private and public sectors.

In 2019, support has been given to 12 follow-up projects that deal with machine translation, speech synthesis, speech recognition and the like. The development of the Estonian Sentence Controller has begun, with the help of which potential errors can be detected in a wider context, within the sentence. Speech recognition technology has been actively used in the public sector and this year, speech recognition will also be introduced in the Riigikogu to automatically create transcripts. The popularity of the machine translation application, where users can translate Estonian or English speech in real time into English, Estonian, Russian or Latvian, is gaining popularity.

The Year of the Estonian Language continues with the Month of Language Learning, Reading, Language Technology and Estonian-language Education

Ministry of Education and Research has declared 2019 as the Year of the Estonian Language to celebrate the 100th anniversary of the official language. Various events continue to draw attention to the fact that the Estonian language is not self-evident — it must be actively and skillfully used and its status and development recognised and supported.

September is the month of language learning and translators, culminating in the World Estonian Language Learning Week. October is the month of reading and games when children's books are read in libraries. November is the month of Estonian-language research and language technology, and there will be several conferences and seminars. December is the month of Estonian-language education, and the national university, University of Tartu, celebrates its 100th birthday.

The calendar of events is on the website of the Institute of the Estonian Language (www.eki.ee).

About two hundred Estonian children living abroad study in their mother tongue at Üleilmakool

Üleilmakool strengthens the link between Estonian children living abroad and Estonia by offering them the opportunity to study in their mother tongue. During the 2018/2019 academic year, 185 children from 28 countries studied at the school.

The number of children of Estonian origin living outside Estonia continues to grow, which is why the need to invest in learning Estonian and Estonian-language education abroad is growing. Maintaining and developing Estonian language skills is essential to make it easier for people to return to Estonia.

Üleilmakool helps Estonian children living abroad to maintain and develop their Estonian language skills, while preparing them for study in Estonia. For this purpose, the school offers both curriculum-based and simplified e-courses.

In this academic year, students in grades 1–9 will be able to study Estonian language and literature, Estonian history, Estonian geography and mathematics in a total of 23 different e-courses. Students can also take part in Skype classes.

Launched and operated with the support of the Ministry and partly based on the Estonian national curriculum, Üleilmakool studies take place in the HITSA Moodle environment.

State supports learning Estonian as a second language and foreign language learning

More than 120 preschool and general education teachers in Ida-Virumaa County have been provided with free Estonian language courses at levels B2 and C1 to prepare them for the required proficiency examination.

Students studying to become foreign language teachers as well as qualified foreign language teachers have the opportunity to take free internationally recognised language exams at levels B2, C1 and C2 through the Estonian Association of Foreign Language Teachers. The larger the number of teachers that have passed an international test, the better the quality of teaching.

The state is vigorously developing digital solutions so that everyone can learn Estonian free of charge at any time, anywhere.

The state supports official and foreign professional language learning by vocational and university students in order to improve their career opportunities and mobility on the labour market. In order to improve the performance of people with insufficient official language skills on the labour market, they are provided with language practicing and traineeship opportunities in regions where the need for this is the greatest.

Support is given to cooperation projects of different educational institutions concerning the Estonian language and foreign languages in order to improve people's language skills, support integration and promote educational choices. There is no deadline for applications, Foundation Innove receives applications on a rolling basis.

CertiLingua programme open to new schools

Piloted in Estonia since 2015, the CertiLingua programme is open to all interested parties for the second year. CertiLingua is an International Certificate of Quality, established in Germany, which certifies that an upper secondary school graduate is fluent in two foreign languages at least at B2 level, has completed integrated subject and language studies and has acquired European and intercultural competences. Certificates for students can be issued by schools accredited by the Ministry of Education and Research. Participation

in the programme gives the school the opportunity to fully value multilingualism at school and in the curriculum.

To date, four CertiLingua schools have been accredited in Estonia: Viljandi Upper Secondary School, Tartu Annelinna Upper Secondary School, Kristjan Jaak Peterson Upper Secondary School and Kadrioru German Upper Secondary School.

Number of Estonian-language higher education textbooks is approaching 100

The state supports the compilation of Estonian-language higher education textbooks in order to promote the development, dissemination and consolidation of Estonian-language research terminology, to support studies and teaching in higher education with appropriate methodology and to value publishing in Estonian. Up to ten textbooks are supported each year.

The state has been supporting the publication of Estonian-language higher education textbooks since 2008; to date, 80 Estonian-language higher education textbooks have been published.

Ministry of Education and Research has declared 2019 as the Year of the Estonian Language to celebrate the 100th anniversary of the official language.

The state continues to support Estonian terminology work

Professional Estonian-language communication requires an organised and extensive specialised language vocabulary. Supporting terminology work (www.terminoloogia.ee) is important because up-to-date specialised language is needed in each area, enabling both professional communication and use in scientific texts.

The principles of supporting the language planning and terminology work in Estonian (2019–2027) place great importance on the development of terminology and the public sharing of results, international cooperation, the support to terminology committees and exchange of information among the terminology community.



Research

Estonia is preparing a new strategy in the field of science

The new Estonian Research, Development, Innovation and Entrepreneurship Development Plan 2021–2035 will essentially be completed in 2019. International experience shows that it is wise to address research, development, innovation and entrepreneurship within a common strategic framework in order to create greater coherence between these areas.

From the point of view of the research system, the highest development priorities are related to maintaining the high level of research careers and research, developing a management model for research infrastructure, harnessing research results to meet the challenges of Estonian society and maximising the potential of international R&D cooperation. Other parts of the strategy deal with development, innovation and tourism.

A new framework programme for research funding, Horizon Europe, is under preparation

The strategic planning of the EU framework programme for research and innovation Horizon Europe is ongoing. The aim of the programme is to support research and innovation in the European Union in order to increase the EU's productivity and competitiveness, contribute to global challenges and support the achievement of the sustainable development objectives. The proposed financial volume of the programme is EUR 100 billion.

For the first time, the framework programme includes missions aimed at finding research-based and innovative solutions to major societal challenges. Five mission areas, chaired by the mission councils, were agreed during the negotiations on the framework programme. Estonian representatives were elected to three mission councils. In the course of strategic planning, more detailed design of the rest of the framework programme, including partnerships, continues.

The level of research funding in relation to GDP may not fall; at least EUR 60 million in absolute terms will be added over the next four years

The government has set a target to maintain the share of research funding at least at the level of 0.71% of GDP in the state budget strategy and to find additional resources this autumn when drawing up next year's state budget, which would bring it closer to the 1% target. According to the state budget strategy 2020–2023, nearly EUR 60 million will be added to the research system over four years.

In December 2018, the leaders of Estonia's political parties and representatives from research institutions, representatives of researchers and the largest business organisations signed a social agreement for the development of R&D and innovation. The parties to the agreement support an increase in public R&D and innovation funding to 1% of gross domestic product. This ambitious target would require an additional EUR 47 million annually over the next three years, which is currently unrealistic in a tight budget.

Estonia gets access to world-class supercomputer

Estonia will have access to a world-class supercomputing resource through its participation in the EuroHPC Joint Venture and the LUMI Consortium.

Estonia also joined the European high-performance data processing joint venture EuroHPC established last year. This summer, EuroHPC selected three consortia that, with EU support, are creating supercomputers to provide world-class computing power to research institutions and the private sector.

Estonia has joined the Finnish-led Nordic consortium LUMI, whose supercomputer will be based in Kajaani, Finland. The Estonian Research Computing Infrastructure (ETAIS) is a partner and access point for Estonian institutions and companies. The role and dimension of ETAIS is also growing and developing with the support of the Estonian and EuroHPC funded Centers of Excellence, which will contribute to strengthening the competencies of the National HPC Centers over the next two years.

The state supports research on resource enhancement with three million euros a year

The state further supports research and development in the field of resource enhancement in the amount of three million euros per year in order to expand, in cooperation with enterprises, the creation and introduction of innovative and knowledge-based solutions in areas of importance to Estonian society and economy.

Results of first call for proposals for Baltic Research Cooperation Programme announced in autumn

The Baltic Research Cooperation Programme supports international research projects that require the strong cooperation and contribution of the Baltic States, Norway, Iceland and Liechtenstein to the challenges that the programme focuses on. There were six challenges in the first round: public health, transplant medicine and health technologies; migration and social inclusion; security and regional cyber security; environmentally friendly solutions; regional economic development, employment, labour market regulation and social policy; more efficient use of resources. The programme, funded by the Norwegian, Icelandic and Liechtenstein financial mechanisms, has a total amount of EUR 22 million, with co-financing from Estonia, Latvia and Lithuania.

At the beginning of 2019, applications were closed for the open call and 130 applications were received. During the round, EUR 6 million will be distributed to projects.

Development advisers start working in professional associations

Development advisers will start working in professional associations this autumn to increase their knowledge of the need for R&D, Estonian R&D, the opportunities for its implementation and its potential impact on economic growth. Development advisers are becoming important links between companies and R&D institutions. The initiative is supported by approximately one million euros from the RITA program.



Youth

Opportunities are being created to develop new smart solutions in youth work

In 2019, the European Economic Area and the Norwegian Support Program "Local Development and Poverty Reduction" is launching a course of action to apply for support for the development of smart solutions in youth work.

Support is provided for the development of smart solutions that contribute to national youth policy objectives: to take into account the views of young people, to prevent social exclusion and to improve the availability and accessibility of youth work services, including youth information. The budget for the call for proposals is EUR 1.7 million.

At least one smart youth work solution to be developed must focus on the systematic and comprehensive expansion of youth participation opportunities. The solution must allow the systematic collection of people's opinions, attitudes and ideas, i.e. regularly and through a technical solution; while at the same time increasing the involvement and participation of young people through purposefully asking for and using young people's opinions and attitudes.

In addition to achieving nationally important goals, smart youth work solutions support Estonia's continued presence at the forefront of the world and its attractiveness in foreign markets, as the smart youth work concept developed in Estonia is unique.

Youth information portal Teeviit provides reliable information, advice and support

The youth information portal *Teeviit* provides high-quality, understandable and relevant information to young people online. The portal provides information on six different categories: learning, work and career, youth work opportunities, relationships and security, health and society. Each month, the portal focuses on one specific theme, and throughout the entire year, one priority topic is highlighted. This year, the focus is on health. Young volunteers are involved in the work of the portal.

The state continues to support the diversification and accessibility of youth hobby education and activities through additional funding of EUR 15 million per year.

This year, the portal launched an *Ideeviit* competition aimed at supporting young people's entrepreneurship and participation. This competition supports the implementation of young people's ideas aimed at raising awareness in areas of interest to them. The idea must solve a problem or bottleneck for young people. *Ideeviit* provides project development advice, support and financial resources. Terms and support for young people are available at www.teeviit.ee/ideeviit/.

Situation of young people in Estonia can be reviewed by regions

Statistics Estonia's regional portrait of young people in Estonia reflects the situation of young people by municipality. The regional overview is based on the administrative division in 2018 and compares 79 municipalities. Results based on surveys are reported by counties or regions. The report is available [here](#).

State support for development of youth hobby education and activities continues

The state continues to support the diversification and accessibility of youth hobby education and activities through additional funding of EUR 15 million per year.

In order to use additional state support, the rural municipality or city must submit a plan to the Estonian Youth Work Centre, alone or together with other rural municipalities and cities, to map the current state of hobby education and activities, bottlenecks and plan further actions to resolve them.

The amount of additional money to be allocated to rural municipalities and cities is calculated on the basis of the number of young people, the number of young people with disabilities and young people living in families with coping difficulties between the age of 7 and 19 years, the financial capacity of the local government and regional availability of hobby activities. Local governments must offer hobby education and activities in at least three areas: culture, sport, and science and technology. State support is complementary to the contribution made by local governments to date, and the responsibility for organising and supporting hobby education and activities will continue to lie with local governments.

The results of the support in 2017–2018 confirm that it has had a positive impact on the range and accessibility of youth hobby education and activities and that it has been used for its intended purpose.

Support to local governments is 95% of the national additional money for hobby education and activities. The second part of the additional state support is intended to promote co-operation between local governments, advise on the preparation of plans, and follow up, which is done by the Estonian Youth Work Centre. The third part consists of support to representative associations of hobby areas to improve the quality of hobbies, and was first granted in 2018. Since 2019, the Ministry of Education and Research has strategic partners in hobby areas: the Estonian Music Schools

Association, Estonian Art Schools Association, Estonian Science Hobby Education Association, Estonian School Sports Association, Estonian Dance Hobby Education Association and Hobby Schools Association.

Find out more here: noortehuviheaks.entk.ee

Additional support measures for inclusion of young people at risk of exclusion and youth employability implemented

In the autumn of 2019, a new period is being introduced to provide support measures for young people in difficult circumstances that are not in education, employment or training (NEETs). In addition, activities continue to support the availability of youth work services in local governments, based on innovative and smart youth work solutions. Activities also continue to provide young people with first-time work experience, become acquainted with different occupations through workshops and virtual workshops, practise in local NGOs and carry out various projects developed by the young people themselves.

Support measures aim at reducing the risk of exclusion and the impact of exclusion and improving the competitiveness of young people on the labour market. Activities will continue until 2023.

Youth workers need to be as valued as educators

The youth worker specialisation is becoming increasingly popular in universities, reflecting the rise in awareness of the profession of youth workers and its impact on society. The number of applicants for the profession has increased. The existence of a professional certificate is also important for employers as it demonstrates the youth worker's practical skills, knowledge and attitudes that meet the professional standard of the youth worker. A professional certificate ensures quality work for the employer.

It is also important for employers to value and recognise youth workers, for example by linking the existence of occupational qualification with the pay.

Miscellaneous

Joint education agency established

As one of the most prominent activities of the state reform, the Ministry of Education and Research is planning to reorganise the work of public administration institutions and create a joint education agency, which is scheduled to start work in September next year.

The aim of creating a joint agency is to improve and harmonise the quality of services provided, to be more flexible and to reduce bureaucracy. The management of work sections and the division of tasks that are carried out in different institutions according to different principles and partially overlap will be reviewed. It should also be borne in mind that new strategic directions in the field of education and research bring about changes that require a new focus.

The creation of a joint agency starts with a thorough analysis and certainly does not simply mean the merging of all institutions. The analysis by Centar Centre for Applied Research will be completed by November.

The preparation of the Education Strategy 2035 has reached the next stage

Meetings of the working groups on strategic planning for the fields of education, research, language and youth for the period of 2021–2035 are continuing. The stages of brainstorming and vision building that began last year are over, and agreement is being reached on the goals and the development activities needed to achieve them.

Working groups involving the Ministry's policy partners and stakeholders started in June this year. The working groups discussions are based on vision documents, analyses (including mid-term reviews of existing development plans), European Union legislation and documents, and OECD analyses. The composition of the working groups, meeting schedules, background material and the results of the discussions can be found on [the Ministry's website](#).

In cooperation with the *Huvitav Kool* initiative and NGOs, the Estonian Association of Youth Associations, the Estonian Education Forum and the Estonian Chamber of Culture, the Ministry is organising a number of public debates in different regions of Estonia to better involve stakeholders. A public e-consultation is being planned.

The Ministry also relies heavily on existing committees, working groups and networks for stakeholder involvement.

Draft full texts of strategic development documents will be completed by the end of 2019. Based on these, programmes will be developed in 2020 to implement the strategies for the next four years (2021–2024).

In the ongoing strategy process, the ministry is moving in the same timeframe as other major Estonian strategy processes, such as the cross-cutting strategy *Estonia 2035*, which will also provide a basis for planning and using the next period's EU funds. In this way, the Ministry of Education and Research receives input from other strategy processes in the country, while also providing input.

In order to better link research and development topics with entrepreneurship, the Ministry will, in accordance with the Government's decision, draw up a joint development plan with the Ministry of Economic Affairs and Communications: Estonian Research and Development, Innovation and Entrepreneurship Development Plan 2021–2035.

Entrepreneurship education reaches half of Estonian schools

The *Edu ja Tegu* entrepreneurship learning programme has raised schools' interest in entrepreneurship education and is reaching an increasing number of students. In this academic year, entrepreneurship is already taught in almost half (43%) of general education schools and in more than half of vocational and higher education institutions. Entrepreneurship is taught by all six public universities.

Launched in 2016, the programme helps to form entrepreneurial attitudes in learners and develop entrepreneurial knowledge and skills. This will support students' informed career choices and competitiveness in the labour market, either as an entrepreneur or as an entrepreneurial employee.

Entrepreneurship education is promoted at all levels of education. To this end, educational materials and training have been developed to help teachers introduce more entrepreneurial learning in their school and in collaboration with other schools and entrepreneurs. Teachers recognise that entrepreneurship education supports teacher-student cooperation, or contemporary learning, as it is experiential.

General education schools and vocational schools are expected to participate in Junior Achievement Student Company and Entrepreneurial School programs, which are consistent with and support the implementation of entrepreneurship and career learning modules and national curricula in both general and vocational education. There is also a call for applications for general education and vocational schools, which can provide support for projects that bring entrepreneurship education to life. Foundation Innove coordinates a network of vocational education career and entrepreneurship teachers, which welcomes teachers from all over Estonia.

Students from all higher education, vocational and general education schools are welcome to attend the STARTER Business Ideas events. Activities are carried out by centres at Tartu University, Tallinn University of Technology and Tallinn University, as well as regional programmes in Pärnu, Narva, and Haapsalu. Schools can also invite STARTER workshops to bring more excitement to entrepreneurship education.

GEIS, the European Global Education Industry Summit, is coming

On 9–10 December, the Ministry is hosting the Global Education Industry Summit (GEIS) together with the OECD and European Commission and with the support of Microsoft. The summit brings together ministers and entrepreneurs to talk about the future of learning — how to use data to promote education.

Schools and preschools receive books on teaching and leadership in Estonian

Two professional books have been distributed to schools and preschools: "*Nähtav õppimine ja teadus sellest, kuidas me õpime*," the translation of the book "Visible Learning" by John Hattie, one of the world's most renowned educators, and "*Koolijuhi kolm võtmetegurit mõjusaks juhtimiseks*," the translation of Michael Fullan's book "The Principal: Three Keys to Maximizing Impact."

Schools and kindergartens that have not yet received their books can contact the Innove Teacher and School Leadership In-Service Training Center: koolitus@innove.ee.



Academic Year
in Numbers
2019/2020

Introduction

The number of students will continue to grow in the years to come. With the schools starting a new term this September, there will be an estimated 153,000 students in regular full-time attendance at general education schools. The number of students may reach 159,000 by 2024. However, this remains far below the number of students in the late 1990s, when more than 215,000 students attended general education schools. There are, however, regional imbalances apparent – the number of students is increasing mainly in Tartumaa and Harjumaa counties.

Although the overall number of students is growing, the number of pupils starting primary education is close to reaching its peak and is expected to slightly decrease in the years to come, remaining around 14,400 as compared with the level of recent years – about 15,000.

Admissions to vocational schools have been stable over recent years, with the average age of vocational students rising. Adult learners wish to improve their labour market competitiveness and learn new skills.

The number of students in higher education continues to decrease, driven, inter alia, by demographic changes (the number of 18- to 24-year-olds and their proportion of the total population are decreasing) and changes in the choice of educational trajectories. There is a growing trend for students to take a break between completing upper secondary education and starting university or vocational education. This is also confirmed by the fact that the average age of university students (and new entrants to higher education) as well as the proportion of adult learners in vocational education are growing. The number and proportion of international students are increasing.

Most of the changes in the school network are related to the reorganisation of the network: in general, this means that upper secondary education is discontinued at municipal schools and the schools continue as basic schools. This has led to a decrease in the number of 12-year schools and a corresponding increase in the number of basic schools.

With the salaries of teachers continuing to grow, the state considers it important to bring the salaries of kindergarten teachers up to that of teachers. At

the same time, many general education teachers are still working part-time (in the last academic year, more than 43% of teachers worked part-time). The situation is expected to somewhat improve as a result of the ongoing reorganisation of the school network.

The exact number of students in the new academic year will be available in mid-November, after schools and local authorities submit their data to the Estonian Education Information System (EHIS).

More detailed data on education, science, youth and language are available in the educational statistics database www.haridussilm.ee and analyses are available at the Ministry's website under "Statistics and analyses": <https://www.hm.ee/et/tegevused/uuringud-ja-statistika-O>.

Data on school and university students

General education

In the **2019/2020** academic year, there are about 153,000 students in regular full-time attendance at general education schools. The number of students in regular full-time attendance is projected to increase until 2024 and then start declining slightly. It is estimated that the number of students in general education in 2030 will be the same as today.

This year about 14,500 children will start primary education. About 90,000 students will attend grades one to six. About 41,000 students will attend grades seven to nine.

About 8,200 students will enter grade 10 and 7,000 grade 12. A total of about 22,600 young people will be in upper secondary education, i.e. in grades 10 to 12.

Number of regular full-time students in grades 1, 10 and 12 (Source: EHIS)

Year	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Grade 1 students	13 260	13 697	14 152	14 723	15 457	15 234	15 437	14 898
Grade 10 students	8 566	8 127	7 846	7 406	7 588	7 966	8 053	7 988
Grade 12 students	8 324	7 810	7 173	6 963	6 781	6 460	6 568	7 015
Total students	136 104	134 975	135 392	137 236	140 483	143 713	147 849	151 164

Estimated number of students in 2019–2024 (Source: Statistics Estonia (table RV0212), EHIS)

Year	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
Grade 1 students	14 500	14 200	14 200	14 500	14 500	14 400
Total students	153 000	155 000	156 500	158 000	159 000	159 000

Vocational education

A total of about 23,000 people attend vocational schools. The average age of vocational students has significantly increased in recent years due to a larger number of learners aged 25 and over wishing to learn a profession or improve their employability. Although adult learners have usually already completed secondary or higher education, many of them enter level 4 vocational training, which requires the completion of basic education.

Number of vocational students by types of study (Source: EHIS)

Type of study	Number of vocational students						
	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Vocational education without requirement for basic education ¹	421	371	448	816	1 120	1 066	1 183
Vocational education based on basic education ²	966	1 005	2 121	4 660	6 674	7 520	8 269
Vocational secondary education ³	14 152	13 245	12 420	11 700	11 308	10 717	10 027
Vocational education based on secondary education ⁴	10 633	11 078	10 248	7 731	5 969	4 840	3 908
Total	26 172	25 699	25 237	24 907	25 071	24 143	23 387
Proportion of students aged 25 and over	23,3%	26,3%	29,2%	31,9%	35,1%	36,7%	39,6%

1 Vocational education without the requirement for basic education (ISCED level 2C) = vocational education without the requirement for basic education + level 2 vocational education + level 3 vocational education.

2 Vocational education based on basic education (ISCED level 3C) = vocational education based on basic education + level 4 pre-training + level 4 continuing vocational education and training.

3 Vocational secondary education (ISCED level 3B) = vocational secondary education + level 4 pre-training (vocational secondary education).

4 Vocational education based on secondary education (ISCED level 4B) = vocational education based on secondary education + level 5 pre-training + level 5 continuing vocational education and training.

Higher education

The number of university students is expected to continue to decrease. Compared with seven years ago, the number of admissions to Bachelor's degree programmes in particular has decreased due to the decreasing number of young people. The number of international students continues to grow, in particular master's students and doctoral students. Similarly to other levels of education, the final number of admissions will be available in mid-November after all students are matriculated and the data submitted to the Estonian Education Information System.

Number of university students by higher education levels (Source: EHIS)

Academic year/ type or level of study	Number of higher education students						
	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Professional higher education	20 233	17 878	15 749	14 235	13 414	12 900	12 601
Bachelor's study	24 525	22 661	20 550	18 899	16 849	16 059	15 830
Integrated Bachelor's and Master's study	3 949	3 731	3 589	3 344	3 308	3 172	3 189
Master's study	13 055	12 746	12 423	11 781	11 588	11 533	11 783
Doctoral study	3 044	2 982	2 903	2 833	2 634	2 490	2 412
Total	64 806	59 998	55 214	51 092	47 793	46 154	45 815

Number of international students by higher education levels (Source: EHIS)

Academic year/ level of study	Number of international students			
	2015/16	2016/17	2017/18	2018/19
Professional higher education	68	122	204	340
Bachelor's study	1 568	1 566	1 701	1 740
Integrated Bachelor's and Master's study	278	286	295	322
Master's study	1 223	1 568	1 768	2 129
Doctoral study	339	375	426	516
Total	3 476	3 917	4 394	5 047

Kõrghariduse tasemele vastuvõetute arv aastas õppetasemete lõikes (allikas: EHIS)

Academic year/ level of study	Number of admissions						
	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Professional higher education	4 778	3 726	3 472	3 895	3 807	3 435	3 277
Bachelor's study	6 450	6 042	5 119	5 273	5 091	5 104	5 081
Integrated Bachelor's and Master's study	703	609	631	622	628	646	694
Master's study	3 982	3 842	3 894	3 978	4 173	3 956	4 249
Doctoral study	392	387	361	370	358	350	369
Total	16 305	14 606	13 477	14 138	14 057	13 491	13 670

Adult education

Since 2009, more than 10% of adults have participated in lifelong learning. Last year (2018) 19.7% of adults aged between 25 and 64 participated in lifelong learning.⁵

In the academic year 2018/2019, there were 5,486 distance learners in general education, which is slightly more than a year ago.

The share of adult vocational learners (aged 25 and over) increased in the academic year 2018/2019 compared with the previous year: in 2017/2018, the share of learners aged 25 and over was 36.7%, while in 2018/2019 the figure had risen to 39.6%. The number of adult learners aged 30 and over in higher education decreased from the 2011/2012 academic year, but has started to increase in recent years, amounting to 28.5% of the total university student population in 2018/2019.

The number of adult learners has increased in particular in vocational education (Source: EHIS)

Adult learners in formal education							
	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Non-stationary learners in general education*	5 970	5 075	5 279	5 377	5 448	5 428	5 486
Adult learners (aged 25 and over) in general education	1 543	1 437	1 631	1 648	1 616	1 714	1 744
Adult learners (aged 25 and over) in vocational education	6 101	6 770	7 366	7 933	8 801	8 866	9 259
Adult learners (aged 30 and over) in higher education	14 062	13 623	13 076	12 611	12 280	12 474	13 067

* 20% of non-stationary learners are 17 years old or younger.

Share (%) of 25–64-year-olds who have participated in formal education or training in the last 4 weeks (Source: Eurostat)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Estonia	6,0	6,5	7,0	9,7	10,5	11	11,9	12,8	12,6	11,6	12,4	15,7	17,2	19,7
EU average	9,6	9,6	9,4	9,5	9,5	9,3	9,1	9,2	10,7	10,8	10,7	10,8	10,9	11,4

⁵ The participation of adults in lifelong learning is measured as participation in education or training during the 4 weeks prior to the survey (among 25- to 64-year-olds). The figure is based on the results of the Estonian Labour Force Survey.

Teachers

Number of teachers by types of educational institutions

The number of teachers continues to exceed the number of teaching positions, which indicates that a significant number of teachers work part-time.

Number of teachers and teaching positions in the last academic year (2018/2019) (Source: EHIS)

Number of general education teachers	15,465 persons	Number of general education teaching positions	12,852 positions
Number of vocational education teachers	2,001 persons	Number of vocational education teaching positions	1,311 positions
Number of pre-school teachers	7,934 persons	Number of pre-school teaching positions	7,603 positions

General education teachers

The minimum salary of municipal school teachers has increased 61% over the last six years (2013 vs. 2018). During the same time period, the average gross salary of municipal school teachers has increased by 59%, i.e. at nearly the same pace.

Average gross monthly salary and minimum salary of teachers compared to the Estonian average (Source: Trial Balance, EHIS)

Year	2011	2012	2013	2014	2015	2016	2017	2018
Average gross monthly salary of a municipal school teacher	797€	812€	930€	1,025€	1,135€	1,206€	1,289€	1,478€
Minimum monthly salary of teachers	644€	644€	715€	800€	900€	958€	1,050€	1,150€
Average national gross wage (Statistics Estonia)	839€	887€	949€	1,005€	1,065€	1,146€	1,221€	1,310€
Average gross monthly salary of a municipal school teachers as a share of the national average gross monthly salary	95%	92%	98%	102%	107%	106%	106%	113%

The student to teacher ratio is very low — in recent years it has been about 12 students per teaching position. 20+ years ago the ratio was 19 students per teaching position. Since 2012/2013, when the student to teacher ratio was the lowest in the period in question, the ratio has increased slightly.

In the last academic year (2018/2019) the number of teachers and teaching positions increased compared to earlier years. However, in the last eight academic years, the average workload of teachers is 83%, i.e. fluctuations in the numbers of teachers and teaching positions have had virtually no effect on the average workload. Many general education teachers work part-time. The TALIS survey⁶ (focusing on Gr. 7 to 9 teachers) suggests that many teachers working part-time are willing to work full-time. The organisation of work at a school depends on the human resources policy applied by the head of school as well as on the school network policy of the school owner.

⁶ The OECD (Organisation for Economic Co-operation and Development) Teaching and Learning International Survey (TALIS) is an international survey that collects data on learning environments and teachers' working conditions.

Change in the numbers of teachers and students. The change in the number of students is available in the section concerning general education (Source: EHIS)

Academic year	Number of teachers	Number of teaching positions	Number of full-time students	Number of full-time and non-stationary students	Number of students per teaching position
1998/1999	16 919	12 960	217 577	223 660	17,3
1999/2000	18 434	14 324	215 841	222 200	15,5
2000/2001	18 278	14 050	212 184	218 555	15,6
2004/2005	15 974	13 864	183 951	190 879	13,8
2005/2006	15 827	13 670	173 822	180 963	13,2
2006/2007	15 183	13 003	164 024	170 994	13,2
2007/2008	15 039	12 845	155 071	161 961	12,6
2008/2009	14 682	12 452	147 519	154 481	12,4
2009/2010	14 701	12 203	141 802	149 641	12,3
2010/2011	14 394	11 970	138 448	145 939	12,2
2011/2012	14 263	11 902	136 104	142 983	12,0
2012/2013	14 203	11 882	134 975	140 945	11,9
2013/2014	14 226	11 739	135 392	140 467	12,0
2014/2015	14 329	11 680	137 236	142 515	12,2
2015/2016	14 409	11 820	140 483	145 860	12,3
2016/2017	14 581	12 067	143 713	149 161	12,4
2017/2018	14 905	12 372	147 849	153 277	12,4
2018/2019	15 465	12 852	1511 64	156 650	12,2

General education teachers by workload; academic years 2015/2016 to 2017/2018 (Source: EHIS)

Workload (EHIS)	Percent of teachers			
	2015/2016	2016/2017	2017/2018	2018/2019
<0,5	17,3%	16,6%	16,7%	16,8%
0,5–0,99	27,2%	27,0%	25,6%	25,4%
1	48,7%	47,0%	49,0%	48,1%
>1,0	6,8%	9,3%	8,7%	9,7%

Number and sizes of schools

Fun fact

In the last academic year (2018/2019) the largest school in Estonia was Tallinna Linnamäe Vene Lütseum (Tallinn Linnamäe Russian Lyceum) with 1,486 students, while the smallest was Misso Kool (Misso School) with only three students.

Kindergartens

In the academic year 2018/2019, there were 618 kindergartens in Estonia, including 129 preschool institutions operating together with general education schools. As of 2018, 93.8% of children between the ages of 4 and 7 participated in preschool education. The participation in preschool education has remained at the same level in recent years.

General education schools

This academic year, Estonia has 530 general education schools, including

- » 52 primary schools (grades 1 to 6);
- » 307 basic schools (grades 1 to 9);
- » 157 combined primary/lower secondary/upper secondary or upper secondary schools (grades 1 to 12 or grades 10 to 12);
- » including 26 upper secondary schools; this number includes nine state upper secondary schools (only grades 10 to 12);
- » 14 schools are adult upper secondary schools.

The number of schools takes into account that at this stage, Leie Basic School will not be merged with Kalmetu Basic School.

In the last academic year, there were 74 small upper secondary schools, i.e. upper secondary levels (grades 10 to 12) with less than 100 students, including 43 with less than 50 students.

18 basic schools were classified as “very small” — they had fewer than 30 students. 31 primary schools (grades 1 to 6) also have fewer than 30 students.

Institutions providing vocational education

In the 2019/2020 academic year, formal vocational education is provided by 32 vocational education institutions and five state owned professional higher education institutions.

The 32 vocational schools include:

- » 26 state vocational schools;
- » 4 private vocational schools;
- » 2 municipal vocational schools.

Higher educational institutions

In the academic year 2018/2019, higher education is provided by a total of 19 educational institutions, including:

- » six public universities;
- » one private university;
- » seven state and five private professional higher education institutions.

Hobby schools and youth centres

The number of hobby schools has significantly increased over the years, and the growth continues. The statistics in the table below include only those hobby schools that were registered in the Estonian Education Information System (EHIS) in the given academic year.

Hobby schools and open youth centres by year (Source: ENTK)

Academic year	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19
Hobby schools	410	416	527	562	591	625	597	651	750
Open youth centres	210	210	227	237	246	247	263	281	280
Hobby schools per 1,000 youth	1,29	1,34	1,74	1,9	2,03	2,2	2,1	2,33	2,71
Open youth centres per 1,000 youth	0,66	0,68	0,75	0,8	0,85	0,87	0,93	1,01	1,01

Changes in general, vocational and higher education infrastructure in the academic year 2019/2020 as compared to 2018/2019

Most changes in the school network are related to the reorganisation or merger of schools. The state's objective in reorganising the school network is to ensure that schools are not simply closed; instead, levels of education are discontinued while ensuring that children can attend a local school for as long as possible. In collaboration with local authorities, the focus is on strengthening the network of 6-year primary schools.

Mergers of schools

Kohtla-Järve Järve Russian Upper Secondary School is merged with Kohtla-Järve Slavic Basic School and will discontinue operating as a separate school. The merger of Leie Basic School with Kalmetu Basic School has been contested.

Changes concerning private schools

Two new private schools have been opened: Vivere Private School (basic school) in Tallinn and Audentes International School (upper secondary school), offering the International Baccalaureate programme.

Private schools Avatud Kool and Emili Kool will start the provision of education at stage II (grades 4 to 6).

Stage III (grades 7 to 9) is added to Gaia School, Kaarli School and St John's School (all in Tallinn), Kohila Manor School (Kohila Municipality), Leiu-tajate Village School (Rõuge Municipality) and Pärnu Waldorfkool (Pärnu Town). The application by Tartu Luterlik Peetri Kool (St Peter's Lutheran School of Tartu) for opening the third school stage is pending.

The upper secondary stage has opened at Tallinn International School.

Pikakannu School will be discontinued and Gaia School will close its Märjamaa branch.

Mergers of schools with kindergartens

Local kindergartens are being merged with Kivi-Vigala Basic School and Puka School. These schools will continue as preschool-basic schools.

Separating kindergarten from school

The kindergarten sections of Aseri School and Vastla School will be discontinued; both schools continue as basic schools.

Discontinuing school stages

Kernu Basic School and Sonda School will discontinue stage III.

Discontinuing the upper secondary stage and opening of a new state upper secondary schools

Leisi Secondary School, Keila Comprehensive Upper Secondary School, Järve Upper Secondary School in Kohtla-Järve, Ahtme Upper Secondary School in Kohtla-Järve and Puka Secondary School are discontinuing the upper secondary school stage and will continue as basic schools; Puka Secondary School will continue as a kindergarten-basic school. A new state upper secondary school has been opened: Kohtla-Järve Upper Secondary School.

Schools to be closed

Ämari Basic School, Tudulinna School and Haapsalu Adult Upper Secondary School are discontinued.

Transfer of school ownership

The Ministry of Education and Research transferred Vaeküla School, now renamed Näpi School to Rakvere Municipality and Lahmuse School to Põhja-Sakala Municipality.

Changed planned for coming years, notified by local authorities⁷

Gradual reorganisation from a full-cycle school to a basic school, i.e. discontinuing the upper secondary stage by not admitting new students:

- » Libatse Kindergarten-Basic School will be discontinued (academic year 2020/2021);
- » Sonda School will discontinue the second school stage (academic year 2020/2021);
- » Tallinn Pääsküla School will continue as a basic school (academic year 2020/2021).

Changes in vocational and higher education institutions

As of 1 May 2019, the Estonian National Defence College is renamed the Estonian Military Academy.

As of 1 September 2019, Lääne-Viru College will be merged with Tallinn University of Applied Sciences and the programmes taught at Lääne-Viru College will be taught at the merged school with one of its locations being in Mõdriku near Rakvere. In the 2019/2020 academic year, Lääne-Viru College will not provide vocational education.

⁷ As the deadline for notification is 5 months before reorganisation becomes effective, some local authorities may already have taken a decision but have not yet notified the state thereof.

Ministry of
Education and
Research

Analysis of the
execution of
development plans
of 2018



An analysis of the execution of the Ministry of Education and Research's sectoral development plans of 2018 assesses the progress towards the fulfilment of its strategic objectives and analyses in depth the focus topics of Estonian education.

In 2016, we analysed in depth seven challenges for education in Estonia: low level of adult participation in lifelong learning, low attractiveness of the teaching profession, gender gaps in education, increasing proportion of undereducated young people, unpopularity of vocational education, low learning outcomes concerning Estonian as a second language and the school network not matching demographic trends. In 2017, we focused on five strengths of education in Estonia: good skills, rising teachers' salaries, participation in youth work, popularity of natural and hard sciences in higher education and international students in Estonian universities. In 2018, the focus was on educational paths after basic and general upper secondary education. This year, the indicators are supplemented by a Performance Report, which discusses in greater detail how gifted learners are identified and supported in the educational system and the trends in the generational replacement of teachers.

Key messages

The good news in education is that there is an upward trend in the employment and salaries of graduates from both higher and vocational education, which shows that highly qualified professionals are in demand in the labour market. Participation of adults in lifelong learning is growing, including among under-educated people. A positive trend is that the proportion of people without any professional or vocational qualifications is (slowly but steadily) decreasing. In keeping with the needs of the labour market, ICT is prioritised in higher education and the number and proportion of international students is growing quickly, in particular at doctoral level. Since 2014, the average gross monthly salary of teachers has been higher and grown faster than the national average.

Ageing teachers and the resulting growing shortage of teachers are major challenges. Persistent problems include: high drop-out rates from both higher and vocational education, increasing share of young people with low educational attainment not in education, inadequate access to support services at different levels of education and adequate knowledge of Estonian as a second language upon completing basic education. Moreover, the existing educational system is too rigid and the organisation of studies is based on the logic of linear educational paths, which does not take into account the needs of modern learners (who are often older and more experienced as well as more confident in their choices and ambitions) and does not enable adapting to the needs and requirements of the rapidly changing labour market.

When evaluating the current situation of youth work it should be borne in mind that the number of young people and their share in total population is decreasing. Estonia has gone from about 303,000 young people at the beginning of 2012 to just over 276,800 five years later, at the beginning of 2018. According to Statistics Estonia's population projections, the share of young people in the total population will continue to decrease until 2020. Although net migration, including among younger age groups, has been positive in recent years, the number of young people is not expected to increase exponentially.

While the number of young people not in employment, education or training (NEET youth) has decreased by half compared with 2010, it grew in 2018; it is estimated that there are 12,300 young people in Estonia who are not in employment, education or training¹; regional imbalances are particularly worrying —

in northeastern Estonia, for example, the share of NEET youth is 13.7% (Estonian average — 9.8%).

Participation of young people in youth work is increasing and satisfaction with youth work is high.

A number of indicators in the field of research show the excellence of Estonian researchers, but the development of research in Estonia is hindered by underfunding. Estonia has established a functional and evolving research, development and innovation (RDI) system that is based on quality competition. Researchers are increasingly involved in international cooperation; the high level of research activities is demonstrated by high publishing rates and successful participation in the European Union research and innovation framework programme Horizon. The number of doctorate graduates has increased in recent years. The growth is driven by a high number of admissions around 2010. Estonia is becoming an increasingly attractive target country for international researchers, whose numbers are growing in public research institutions.

The greatest challenges in the field of research are the inclusion of companies in research and development activities and research funding. Estonia is distinguished by a high share of project-based R&D as well as by a high share of external providers of research funding, in particular in the public sector. Research and development for the benefit of society and economy is rather weak. The level of collaboration between universities and enterprises is low: Estonia clearly lags behind the EU's innovation leaders in terms of the number of joint publications between researchers and entrepreneurs. While the contribution of the private sector in funding R&D institutions has increased and constituted 5.1% in 2017, it is well below the target level of 7%.

The level of proficiency in Estonian as the native language remains stable. While the proficiency in Estonian as a second language has slightly improved over the last decade, it has remained at the same level in recent years. Teaching Estonian or creating opportunities for learning Estonian abroad is important in order to create/maintain motivation to return to Estonia and to make it easier for those who do return to study in Estonian schools. The foreign language skills of upper secondary school leavers are improving. However, more attention should be paid to improving the foreign language skills of people with a native language other than Estonian.

¹ Source: Statistics Estonia.

Summary of performance reports

Education

1. **The share of 4- to 6-year-olds participating in pre-primary education** has increased since 2010.² Information on those not participating is not available. It is assumed that some of these children attend childcare, are looked after by parent(s) or grandparent(s) or have moved abroad with their parents without the Population Register being notified. There are also children not attending kindergarten due to a shortage of places. The number and share of children with a mother tongue other than Estonian participating in Estonian-medium pre-primary education, including those in language immersion programmes, has increased year on year.
 2. **The share of young people aged 18–24 with low educational attainment and not in education or training** is over 11% and has increased in recent years; particularly worrying are the high share of people without upper secondary education in younger age groups and gender gaps in post-basic school education (the share of women with low educational attainment and not in education or training is 6%, while the share of men is 16%). The target of the lifelong learning strategy is to have under 9% of these youth by 2020.
 3. **Regional disparities in changes in the number of students** continue to place high expectations on the school network reform. Over the past decade, the number of basic school students has increased only in Harjumaa and Tartumaa counties, and has decreased most notably in Hiiumaa, Jõgevamaa, Võrumaa and Põlvamaa counties. In the 2018/2019 academic year there were a total of 532³ general education schools in Estonia, including 357 primary and basic schools, 160 upper secondary schools and 15 adult upper secondary schools. There are 15 state upper secondary schools in 13 counties. There are plans for a total of 25 state upper secondary schools by 2023. There are also a number of private schools — 56 in the autumn of 2018 (compared to 33 private schools in the 2009/2010 academic year), half of them in Tallinn.
 4. **The distribution of basic school graduates between vocational and general secondary education** continues to be skewed in favour of the latter. The goal for 2020 is to have a ratio of 35 to 65; however, over the past five years, 25–27% and 69–72% of basic school graduates chose vocational education and general secondary education, respectively.⁴ The results of a survey carried out among grade 8 and grade 11 students showed that the level of awareness of vocational educational opportunities is low and that information about the opportunities and advantages of vocational education does not reach young people. However, the data demonstrate that within three years of completion of basic education, a significantly larger number of young people enter vocational education (37–38%).
 5. **A system of study and career counselling** was launched and became fully operational in 2015, and since then the number of students who have received support under the programme has grown exponentially: in 2014–2018 study counselling and career services were provided to more than 120,000 children and young people. The work of Rajaleidja centres in counselling parents and educators is very challenging and more laborious than planned. The activities in 2018 were affected by preparations for a career services⁵ reform implemented in 2019, during which career counselling and career information services were transferred from Rajaleidja to the Estonian Unemployment Insurance Fund.
 6. **The share of people aged between 30 and 34 who have completed higher education** remains high. In 2018, the share of people aged between 30 and 34 who had completed higher education was 47.6%.⁶ The student population is rapidly changing: the total number of university students is decreasing, but not at the second level of higher education. As regards funding, the number of students in state-funded higher education places has increased
- 2 This indicator is calculated using different methods. As the target level (95%) is set by using the Eurostat methodology, it would be practicable to monitor changes also based on the indicator calculated by using the Eurostat methodology (the initial figure for 2017 is 91.8% — the figure for 2018 is not yet available). There is also an Estonian methodology according to which the participation rate in pre-primary education is slightly higher (93.9% in 2017).
- 3 Source: www.haridussilm.ee.
- 4 For post-basic school data see http://www.haridussilm.ee/?leht=alus_yld_3.
- 5 Source: support recipients, Innove.
- 6 Source: Eurostat.

(15% over ten years). ICT is the only field of study where the number of students has increased (by 24% over ten years); in all other fields the number of students has decreased over the last decade — from 7% (health and welfare) to 54% (social sciences, journalism and information).⁷ A change in the division of students between levels of higher education (there are more students at the second and third levels) had led to an increase in the average age of students, which has increased from 25 to 27 years over the past decade.

7. While the short-term learning mobility of Estonian students continues to be below the target of 10% (3.4% in 2018),⁸ it is steadily increasing. In the 2018/2019 academic year, the share of international students averaged 11% and is likely to increase because international students represent 13% of all admissions (37% for doctoral studies). The participation rate of international students in the labour market is increasing: About one in four of those who graduated from higher education in 2017 found a job in Estonia.

8. The proportion of graduates from science, technology and mathematics and ICT as well as from engineering, manufacturing and construction (STEM) has increased in recent years. The figure for 2018⁹ (27.7%) is somewhat lower than a year ago (28.8%) and the target for 2020 (29%). An increase in the number of STEM graduates is important for productivity growth. However, there are significant discrepancies within the three areas measured by the indicator. There is strong demand for **ICT specialists**, and the number of ICT undergraduates and graduates is growing fast, which means that ICT is making good progress towards the target set. There is a significant shortage of specialists in a number of technological fields but the number of graduates is decreasing which suggests that further efforts are necessary to achieve the target. There is strong demand for graduates from a number of fields of study in natural sciences, but salaries tend to be low. Many graduates continue academic studies instead of entering the labour market. The share of STEM graduates has been driven by special grants, the IT Academy programme, including support from businesses in the sector, measures to popularise and promote STEM, science, internationalisation

of higher education, mobility and to foster the next generation of professionals. Young people's choices are inevitably influenced by labour market prospects.

9. Teachers' salaries have been among the fastest-growing in OECD countries — the average gross monthly salary¹⁰ of Estonian teachers has increased nearly 60% over the last six years: while in 2012 the average gross monthly salary of a municipal school teacher was just under €800, in 2018 it was €1,475, i.e. 113% of the national average of that year. The salaries of vocational teachers reached close to the average salary of general education teachers (€1,439). In 2018, local authorities raised the salaries of kindergarten teachers to 85% of the minimum salary of a general education teacher, i.e. €978; by 2019, the salaries of preschool teachers should be at least 90% of the minimum monthly salary of a school teacher, i.e. €1,125. For kindergarten teachers holding a Master's degree, this should be 100%, i.e. €1,250 per month. There are significant regional disparities in teachers' pay: in Harjumaa and Tartumaa counties, the salaries for general education teachers are higher than elsewhere in Estonia (in 2018, in Harjumaa and Tartumaa counties, the average monthly salaries of teachers were €1,565 and €1,514, respectively, while in Hiiumaa and Järvamaa counties, the average monthly salaries were €1,220 and €1,286, respectively). **Increasing teachers' pay** continues to be a national strategic objective. By 2020, the aim is to ensure that the average salary of teachers is equal to or higher than the average salary of an employed higher education graduate and 120% of the average national wage. However, given the sharp increase in the national average, achieving the target is a challenge.

10. Ensuring stable and professional teaching staff across the country is another challenge alongside wage increases. While the total number of teachers has increased by 5% over the last five years, a significant proportion of teachers are not working full-time (often not of their own will, but because their school is too small to offer a full-time position) and, at the same time, there is a shortage of teachers of certain subjects in some regions. The shortage of teachers is expected to increase rather than decrease in the future. This assumption is based on the current age structure of teachers — almost half of Estonian teachers are 50 years

7 Source: EHIS.

8 Source: EHIS.

9 Source: EHIS.

10 Source: Trial Balance, EHIS, Statistics Estonia.

old or older and only 11% of general education teachers are 30 years old and under. There is, and is expected to be in the future, a shortage of science and mathematics teachers; the shortage of teachers is particularly acute in rural areas where schools cannot ensure full-time positions for teachers. Furthermore, the teaching profession is not attractive to young people in 2018, the number of applications per place¹¹ for teacher training programmes was below the average — 0.9) and while there are alternative ways to enter the teaching profession (post-Master's teacher training), this increment may not be sufficient to compensate for the replacement need in the coming years.

11. **The proportion of adults (aged 25–64) without specialised or vocational education** has decreased year on year — 31.7% of 25- to 64-year-olds had no specialised or vocational education in 2010 and 27% in 2018. Particularly vulnerable in the labour market are people with basic or lower educational attainment. People without secondary education are more often unemployed (the unemployment rate among 25- to 64-year-old people without secondary education was 8.4% in 2018 compared with the average of 4.8%) or completely inactive (the labour market participation rate of 25- to 64-year-old people without secondary education was 71% in 2018 compared with the average of 84.5%); their wages are also more often lower. According to Statistics Estonia, there were 83,220 people aged between 25 and 64 without secondary education in 2018. The biggest proportion of such people were aged between 25 and 29 (17%) and the smallest aged between 50 to 54 (5%).

In order to reduce the share of people without specialised or vocational education, it is important to reduce **drop-out rates** from formal education and to increase adult participation in vocational and higher education. From 2018, a new methodology has been applied for the calculation of drop-out rates, e.g. students continuing their education in the same school are no longer considered drop-outs, while those that join in the middle of an academic year are included. Therefore, the drop-out rate from vocational education for 2018 (23.1%) is not comparable to earlier, lower figures; however, it helps to assess learners' previous educational behaviour.

12. **The share of adults participating in lifelong learning reached a record high in 2018.** According to the Estonian Labour Force Survey,¹² 19.7% of the 25- to 64-year-old population segment participated in lifelong learning, 2.5% more than in 2017. This moved Estonia to fourth position among EU Member States. An increase in the participation rate in lifelong learning is primarily driven by increased participation in non-formal learning but also by increased enrolment of adults in various vocational and higher education. For example, the share of adults in vocational education reached 39.6% in 2018.¹³ Participation in lifelong learning is increasing most rapidly among adults that have completed tertiary education; however, the positive trend of recent years is that **an increasing number of people with low educational attainment (completed basic education or lower) participate in lifelong learning**¹⁴ — while in 2010 only 1.9% of that target group participated, in 2018 their participation rate was 4 times higher — 7.3%. This is very encouraging, because there is a tendency both in Estonia and in other countries that those sociodemographic groups that would need both formal and non-formal learning most — older people with lower education — are underrepresented.

13. **While the share of students completing basic education at a Russian language-medium school and having achieved at least level B1 proficiency in Estonian**¹⁵ has increased as compared with 2011 (56% in 2011; 61% in 2018), reaching the target for 2020 (90%) is not realistic. In order to best reflect the progress regarding the Estonian language skills of young people whose native language is other than Estonian, regardless whether they attend an Estonian-medium or a Russian-medium school or participate in an Estonian language immersion programme, we also monitor, besides graduates from Russian-medium basic schools, the Estonian language skills of those basic school graduates whose **native language is other than Estonian**¹⁶ — 69.2% of such students achieved at least level B1 in 2018.

14. **After the partial adoption of Estonian as the language of instruction in Russian-medium upper secondary schools,** 1. the

12 The survey investigates the situation in the Estonian labour market. The data are used to monitor the economy and labour market and to assess the effectiveness of policies.

13 Source: EHIS.

14 Source: Statistics Estonia Labour Market Survey.

15 Source: Innove and EHIS.

16 Source: Innove and EHIS.

11 Source: SAIS.

language skills of school leavers have somewhat improved. While 23% of school leavers failed to achieve a B2 language proficiency level before the transfer, in 2018 the share of such students was 19% (data from EHIS and EIS). The share of students who achieve a high score in the level B2 test (over 75 points) and would be able to sit the level C1 test has also increased — in recent years, nearly two thirds of those who sat an exam of Estonian as a second language scored high marks.

In the 2018/2019 academic year, the number of general education teachers was 15,465; 94% of them have at least B2 and 88% C1 level language skills in Estonian. These indicators have not improved in recent years — in 2012, 93% of

general education teachers had at least B2-level knowledge of Estonian and 87% at least C1. Estonian language skills among teachers of pre-primary establishments are somewhat weaker. In the academic year 2018/2019, there was a total of 1,929 (general education, vocational and preprimary) teachers (8% of total teaching staff) with inadequate Estonian language skills. Improving language skills is important not only for adopting Estonian as the language of instruction (e.g. in upper secondary schools) but also because in schools where teachers' language skills are inadequate¹⁷, those of their students are also weaker.

17 Teachers using Estonian as the language of instruction or teachers teaching Estonian — at least level C1; all other teachers — at least level B2.

Youth work

1. 2015 was the first year to measure young people's satisfaction with youth work. **An average of 86% respondents were satisfied with all youth work activities (share of those saying that they were satisfied or very satisfied). In 2017, the results were similar.** Based on the data from 2017, 91% were satisfied with extracurricular education in particular.
2. The outcomes of youth work are encouraging. **Participation of young people in youth work¹⁸**, i.e. the share of young people engaged in extracurricular education, national youth associations that are beneficiaries of an annual grant, camps, youth summer brigades as well as in local government youth councils and youth activist groups, has increased: 57.8% of young people aged between 7 and 26 were engaged in these activities in 2018 (compared to 37% in 2010). This has been made possible by the increasing number of establishments providing opportunities to participate in youth work; for example, the number of hobby schools has doubled in ten years, from 363 in 2009 to 750 in 2018, which means that there are now 2.71 hobby schools¹⁹ per 1,000 young people (compared to 1.12 in 2009). There has been a modest increase in the number of open youth centres²⁰ — from 222 in 2009 to 280 in 2018; however, in rural regions, such centres are more easily accessible than hobby schools. More than 70,000 young people, i.e. about half of all young people attending extra-curricular

activities participate in sports programmes and more than one quarter in music and arts programmes. Other programmes are less popular; for example, only slightly over 3% choose technology or nature programmes. Technology and nature programmes are available at general education schools.

3. The **regional accessibility of youth work**, measured by the number of young people per hobby schools (369) and youth centres²¹ (989), has significantly improved. The targets for 2020 are 400 and 1,000, respectively.
4. When monitoring young people's participation in youth work, we also looked **at opportunities for organised participation (youth councils, etc.)**. This indicator was changed due to the administrative reform of 2018 (after the number of municipalities was reduced to 79, the target for 2020 (200) was no longer achievable). Starting from 2018, the level of participation opportunities is measured as a share of the total number of municipalities — in 2018 it was 74.4%; the target for 2020 is 89%. What is encouraging is that the share of municipalities where young people have at least one organised participation opportunity was higher in 2018 than in 2017. Therefore, we are moving in the right direction. To achieve the target, both local authorities and young people must be supported.
5. Youth workers are becoming more competent, but the youth work profession needs to be

18 Source: Ministry of Education and Research calculations based on data from EHIS and ENTK.

19 Source: EHIS.

20 Source: ENTK.

21 Source: Statistics Estonia, MoER, ENTK.

appropriately valued (according to OSKA, while 90% of youth workers have higher education, 60% of them have received no specialised training in the field of youth work).

Research and innovation

1. **Scientific publishing** activity that shows that the activities of scientists and high-level research has been increasing (more than 1,600 high-level publications per one million population in 2017)²². This means that the target for 2020 — 1,600 publications — has been achieved. The objective set out in the Estonian research, development and innovation strategy (RD&I strategy) is to ensure that 11% of high-level Estonian publications are among the world's top 10% most cited scientific papers. In the past five years, the figure has been between 7.4% and 8.2%; in 2017, this was 8.2%²³.
2. According to Statistics Estonia, **R&D investment in Estonia has been in decline** since 2012: Investments have fallen from 2.31% of GDP in 2011 to 1.29% of GDP in 2017, while investment in R&D by the business sector has decreased from 1.48% to 0.66%. The Estonian R&D system is heavily project-based (the share of co-funding is small) and the share of external sources in research funding (Structural Funds and Horizon 2020) is large. In late 2018, a social debate on research funding was launched; a cross-party research agreement was signed at the end of the year, which set the objective of increasing public sector R&D funding to 1% of GDP in three years.
3. In the last four years, **the share of exports of high-tech products and services**²⁴ has accounted for 14% of total exports (15.4% in 2015). The share of high-tech and medium-high-tech sectors in total employment²⁵ has grown from 6.7% to 8.3% in the past five years (2017) with the goal for 2020 set at 9%. Science's contribution to the economy is indirectly demonstrated by the level of productivity of business entities per employee (% of the EU average), which in 2017 was 74.4% - below the 2020 target of 80%.
4. 244 people **completed a doctorate** in 2018²⁶. This is slightly less than in 2017 and the target set for 2020 — 300 doctoral graduates per year — is far off. One of the drivers that will enhance the effectiveness of doctoral programmes may be the fact that the number and share of foreign PhD candidates has grown exponentially in the past five years: In 2018, one in three people embarking on a doctorate came from abroad. However, the drop-out rate for PhDs is high (more candidates abandon their doctorate ambitions than complete their studies); also, we need to take into account that those who entered doctorate studies in the years when the number of admissions was significantly smaller (2010–2012) are about to complete their studies. It is all the more important to pay attention to the employment of doctorate graduates in both public and private sectors so that they could realise their potential and skills for the benefit of society.
5. **The European Innovation Scoreboard** places Estonia in the “moderate innovators” performance group. In recent years, we have slipped lower in the international rankings for overall innovation performance (17th in 2017) and are falling increasingly short of the target (11th place). While Estonia stands out in high-level international scientific publications, in international comparison we are lagging behind in terms of R&D expenditure in the business sector.

22 Source: EUROSTAT, Thomson Reuters Web of Science.

23 Source: European Innovation Scoreboard.

24 Source: Statistics Estonia.

25 Source: Eurostat.

26 Source: www.haridussilm.ee.

Estonian language and estonianness

1. Estonian language skills have improved based on the results of both upper secondary and basic school finals although there was a small setback in the last two years (in the 2017/2018 academic year, the average score for tests in Estonian as the native language in basic school was 73.7 and in upper secondary school 62.2, compared to 68.4 and 57.7 in the academic year 2007/2008)²⁷. The share of students scoring 80 and above in the state examination in Estonian as the native language has increased in recent years while the share of those who scored below 20 has decreased.

2. **Outside Estonia**,²⁸ the number of students learning Estonian in foreign universities has remained stable (950 in 2018/2019), while the number of children living abroad and learning Estonian has increased (3,700 in 2018/2019 compared to 1,330 in 2009/2010). The number of general education schools, Sunday schools, societies, kindergartens and nursery clubs as well as language courses in other countries has also increased (80 in 2018/2019 compared to 33 in 2009/2010). Estonian language and culture is taught at 30 universities abroad — in countries where Estonia's interests require it and there is a willingness.

It is estimated that the number of Estonians currently living in other countries is between 150,000 and 200,000. According to Statistics Estonia, the number of immigrants, including returnees who are Estonian nationals and/or were born in Estonia, has grown exponentially since 2015. A total of 40,000 Estonian nationals returned to Estonia between 2004 and 2017, with approximately 24,000 in 2015–2017. The decision to return is affected most by existing family ties, by a desire to contribute to the development of Estonia or to have their children receive their education in Estonia. For returnees with children, it is important to get a place in kindergarten and/or school and that their children adapt quickly and smoothly to the Estonian education system. The major challenges are related to the children's Estonian language skills. Bearing in mind, inter alia, the needs of returnee children, Estonia has started the development of the concept of multicultural education.

3. **The share of non-Estonians with good Estonian language skills** has increased over the past decades to 68.8% in 2018 (compared to 61.2% of 2008). It is mainly non-Estonians aged 30 and younger whose Estonian language skills have improved. A good command of Estonian is essential for success in the Estonian labour market — while nearly 40% of Estonians or non-Estonians with good Estonian language skills work as managers or top managers, only 15% of non-Estonians with a moderate command of Estonian and 10% of those that do not speak Estonian are in managerial positions.

4. **The foreign language** (English, Russian and German) **skills of Estonian population aged between 15 and 74 are improving**. In 2018, 60.7% of adults aged between 15 and 74 spoke at least two foreign languages (53.6% in 2008)²⁹. Learning a foreign language is compulsory in Estonian schools starting from grade 3; however, in the 2018/2019 academic year, about 25% of children of grades 1 and 2 were learning at least one foreign language³⁰.

5. English is the most popular foreign language in Estonian schools (as elsewhere in Europe) — the number of students learning English is nearly double those learning Russian, the second most popular foreign language (2018/2019 academic year)³¹. A survey on foreign language skills conducted in early 2018 showed that English is most beneficial in the labour market — in most fields a good command of English means a significant pay rise. **More attention should be paid to improving the foreign language skills of people whose native language is other than Estonian**. According to PIIAC 2012, only 4% of Estonians in the youngest age group (16–24-year-olds) did not speak English, but among people whose native language is Russian the share of such people was 27%. 80% of Estonians and 46% of non-Estonians have a good command of English.

27 Source: Ministry of Education and Research.

28 Source: Ministry of Education and Research.

29 Source: Statistics Estonia.

30 Source: EHIS.

31 Source: EHIS.

Public governance (archives)

1. After the new Noora Building of the National Archives was put into service in February 2017, the National Archives were again able to accept documents from organisations. As of the end of 2018, the total free repository area in all (7) buildings of the National Archive was 16,907 shelf meters. **Storage conditions improved exponentially and 89% of archival documents are stored in appropriate conditions.** A number of innovative solutions were introduced to improve customer service. The Noora Building helped to make the whole organisation more compact and also more visible.
2. In the field of archives, **the availability of archival documents online has steadily increased** (19.5 million images; the goal for 2020 is 20 million); the number of creators of archives who have transferred digital archives has increased in recent years (from 5 to 8). The share of those archival creators whose documents concerning their main activity have been assessed increased to 98%, i.e. it is very likely that by 2020 the documents concerning the main activities and management functions of all archive creators will be assessed.
3. In 2018, an environment for cooperation between the National Archives and organisations that create information (Astra) was created and became fully functional; the aim of developing such an environment is to consolidate all workflows and documents related to the assessment of archives, thus cutting red tape and making it easier to find and use information.
4. The total number of web sessions reached 1.2 million in 2018. The biggest numbers of users were from Saaga (395,000 users), followed by VAU (276,000 users), the National Archives website (167,000 users) and AIS (148,000 users). Saaga users are more committed than users of other websites — each of them were on the website for an average of 30 minutes, browsing through nearly 60 web pages. The 450,000 searches from AIS usually concerned the names of the most popular persons and organisations.
5. The strong development of archival pedagogy continued in 2018, not least because the Noora Building and other archive buildings were made accessible to students of general education schools and universities. A total of 1,202 people in 2017 and 1,758 in 2018 participated in activities related to archival pedagogy, i.e. lessons on archives, training, etc. Archival pedagogy is a developing field. Therefore, archival pedagogy was included in the set of indicators to be monitored (replacing the indicator of the share of creators of archives, which has already been achieved).
6. The publishing activity of the National Archives focussed on publications related to the 100th anniversary of the Republic of Estonia (e.g. a biography of Konstantin Päts, books concerning the history of the Government Office and the Ministry of Education and Research, a vinyl record dedicated to the national anthem of Estonia). A total of 9 scientific publications and 10 other publications were published.

Mobility of general education teachers based on the Estonian Education Information System (EHIS)

The analysis addressed the shortcomings highlighted in the analysis “Graduates from teacher training programmes and novice teachers based on EHIS” (Selliöv *et al.* 2018): too few graduates from teacher training programmes choose the teaching profession and remain in schools. Also, the OSKA report entitled “Future needs for workforce and skills: education and research” (Mets *et al.* 2018) highlighted issues related to the need to replace teachers that are leaving the profession or retiring. A number of studies carried out in other parts of the world have examined the issue of teachers leaving the profession and the reasons for leaving. The report focuses on the mobility of Estonian general education teachers, their career paths and the employment options of former teachers.

Main conclusions

- » On the level of the education system as a whole, the departure of teachers of general education schools has not been a major issue in the past decade. If a school has a high rate of teacher turnover, the reasons cannot be established based on the registry data.
- » At the state level, the data of the past decade suggest that an average of 83% of general education teachers have worked in a school for at least three consecutive years.
- » In the past decade, an average of 13% of teachers have left the teaching profession within a year. In the given period, no teachers left from an average of 83 schools (16% of all schools) within a year; an average of 70 schools (13%) have had high teacher turnover (>24% of all teachers in the school) — an average of six teachers leave such schools in a year.
- » The teachers who have left schools with high teacher turnover rates are mainly those that do not have the required qualifications and have a fixed-term employment contract. Schools with high teacher turnover rates (more than 24%) are mainly small schools.
- » The workload of teachers in schools with high teacher turnover rates is lower than the national average.
- » Many teachers move from school to school, not from the education sector to other sectors of the economy.
- » There is a positive trend related to teacher mobility — since the 2013/2014 academic year, the number of new teachers entering the profession has been higher than the number of teachers in their last year in the teaching profession.
- » When looking at the career paths of teachers that have worked for the ten years since the 2008/2009 academic year, it is evident that teachers are loyal to their employer — 81% of teachers did not change school in the given period. Working in one school ensures that a teacher is likely to have a higher workload; working in different schools simultaneously means that a teacher is working part-time in each school. Most often, such teachers taught stages 2 and 3 of basic school; stages 2, 3 and upper secondary level; or stages 1 and 2 of basic school; by 2017/2018, the share of teachers teaching upper secondary level had decreased. Teachers that had changed schools at least once in the period between the 2008/2009 and 2017/2018 academic years were teaching more subjects than those that worked in one school.
- » Working in a general education school in a managerial position or as a support specialist after leaving the teaching profession is an exceptional occurrence.
- » According to the 2017 study “Labour market performance,” the further careers of about one quarter of former teachers is known. Most former teachers work in the following sectors: education (15%), health and social work (12%), public administration and defence; compulsory social security (12%), professional, scientific and technical activities (10%), wholesale and retail trade, repair of motor vehicles and motorcycles (10%).
- » In order to monitor teachers’ departure from the profession, it is advisable to look at the rate of teachers under the age of 60 remaining in the profession within five years, the average rate of teachers leaving the profession and whether those that entered the teaching profession stay in the profession for five years; if necessary, the rate of remaining in the profession for five years for the entire teacher population should be monitored.

Gifted learners in Estonian education

Thus far, education policy has primarily considered gifted students as having a special educational need that is manifested as heightened capabilities enabling learners to demonstrate remarkable achievements. Failure to discover gifted students and to develop their talents is a massive waste of human capital, in particular in a small country like Estonia where the proportion of people of working age is falling due to demographic trends and where there is an increasing need for high-technology and knowledge-intensive jobs.

'Giftedness' is a difficult concept to define in unequivocal terms in research and in policy-making. Therefore, it is reasonable to talk about models that concern factors affecting the manifestation and development of talent. Despite these difficulties, it is very important to understand giftedness, because without being aware of the factors affecting how talent manifests itself, it is not possible to discover gifted students or support them using appropriate methods. While the manifestation and development of talent are based on innate abilities, a number of other factors also play an important role, including whether and which opportunities are offered to gifted children by the education system.

The Estonian education system offers many opportunities to diversify and adapt instruction for talented students. However, implementation of the measures depends on teachers' competence and attitudes and on how much the offer of additional opportunities to gifted children is valued within the education system.

The analysis focuses on discovering and developing talent primarily in general education, although support for gifted learners is undoubtedly important at all levels of education and in non-formal education. The analysis examines why is it important to discover and develop talent, how giftedness is defined and what the possibilities are to discover giftedness, what is being done to support gifted learners and what are the shortcomings.