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Language

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Increasingly more people use digital solutions for learning Estonian
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Global School offers new courses

Education and Youth Authority

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Pre-school, basic and secondary education

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Pilot programme for making Estonian language training more efficient expanded to include basic school classes in addition to pre-schools
Basic school graduates can take final examination in Estonian as a second language at B2 level
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PISA 2022 pilot test to take place in spring
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Ministry’s recommendations for the start of the school year amid coronavirus pandemic

19th August 2020

**School year will begin as normally as possible**

The school year can begin with face-to-face teaching. Educational institutions need to maintain and develop distance learning capabilities throughout the school year in order to be prepared for the smooth transition to distance learning if needed.

The government aims to avoid full distance learning. Work will be reorganised by building, institution or area, where needed, taking the local situation into consideration.

The current situation allows to the new school year to begin with traditional assemblies, while bearing in mind that people must stay at home in the case of even the slightest possibility of illness. It is advised to follow good hand hygiene and minimise close contact.

It is normal to begin the new school year with the revision and assessment of students’ level of knowledge. This year, the Ministry advises teachers to pay extra attention to this. The distance learning period in spring has taught us a lot, but it also changed our understanding of the learning environment, learning, teaching and skills. Time planning and finding a balance between work and leisure must be the highest priority for teachers and students alike.

Planning face-to-face teaching and distance learning simultaneously is more time consuming. There is a need to consider which topics require a face-to-face meeting and which are suitable for independent learning. Students must know where and how to find online learning materials and the criteria for the successful completion of an assignment.

Transitioning a student to distance learning must be jointly decided by the student, their parent and the school. The student’s performance, independent learning ability and parental support must be taken into account before allowing student to transition.

Longer than usual deadlines due the possibility of infrequent access to a computer or the Internet must be taken into account during distance learning. The possibility to obtain individual counselling is of fundamental importance during distance learning.
Every educational institution must plan how to mitigate risks with its manager while bearing in mind that face-to-face teaching must be provided to grades 1 to 6 and students with special educational needs and to those who do not find distance learning suitable for as long as possible.

Rajaleidja Centres will provide help with solutions for students with special educational needs.

The Ministry advises that the following areas be addressed in order to mitigate risks:

» the organisation of distance learning, including partial distance learning

» the principles of the work organisation of teaching staff during partial and full distance learning

» the possibilities for reorganising the work of teachers and students in the risk group

» the use of classrooms and school premises and the dispersion of people

» allowing visitors access to school premises

» the organisation of events, gatherings, excursions and field trips

» procurement and use of personal protective equipment

» the principles of communication between school and parents

» identifying COVID-19 cases in schools.

Minimisation of contact is crucial
Haridusasutustel on tungivalt soovitatav korraldada öppetöö jm tegevus selliselt, et vähendada kontakte inimeste vahel.

Educational institutions are strongly advised to arrange learning and teaching so as to allow minimal contact and interaction between persons.

The Ministry advises the use of ‘homebases’ instead of subject classrooms and more outdoor classes and partial distance learning (e.g. by day or by subject). For instance, a regular weekly e-learning day could be planned for older students. The Ministry advises lunch breaks and physical education classes to be arranged in a way that reduces contact between students.

Physical contact between students can also be reduced by starting the school day or breaks at different times, scheduling longer breaks, allowing younger students spend breaks outdoors, etc.

Schools operating in multiple buildings must consider how to reduce the cross-use of classrooms.

It is advised to transition older grades to full distance learning in case the number of cases in Estonia rises. This enables better dispersion of younger grades in buildings. The Ministry advises provision of face-to-face teaching for younger grades as well as students with special needs for as long as possible.

Operation of dormitories is allowed, but the Ministry advises that the possibilities for contact be minimised and all applicable restrictions and safety requirements be followed.

If a person has been in close contact with a person who is COVID-19 positive, they must contact the Health Board for further instructions. Such persons shall not attend school or visit any other public venue. A person is considered to be in close contact if they:

» live in the same household with a person who is COVID-19 positive;

» have been in contact with a person who is COVID-19 positive for at least 15 minutes at a distance closer than 2 metres;

» have been in contact with the body fluids of a person who is COVID-19 positive without personal protection (i.e. has been sneezed or coughed on or has touched a used napkin with bare hands);

» have been in the presence of a person who is COVID-19 positive for at least 15 minutes and closer than 2 metres (i.e. in the same classroom, hall, venue, etc.).

The need for gatherings and events must be considered thoroughly
The mitigation of risks must be taken into consideration when planning an event or a gathering. Attendees must be dispersed or divided into smaller groups. The Ministry advises that international events and travel be postponed.
Accepting visitors is not prohibited, but the Ministry advises consideration of the necessity.

Renting the premises of schools or youth centres to third parties for events and hobby education is permitted, but the rooms must be cleaned and aired afterwards.

It is advised to organise excursions and field trips by grade or group. Upon organising events, the possibility of identifying participants in the case of a positive COVID-19 case must be ensured.

Precaution and mitigation measures are crucial; personal protection equipment is provided by the institution’s manager.

The institution’s manager is responsible for providing personal protection equipment. Teachers and students who are in the risk group shall be guaranteed a safe working and learning environment, for example, from a distance.

Proper hand hygiene, working ventilation and clean surfaces are crucial mitigation measures. Institutions may consider installing disinfectant stations in classrooms and/or walkways while ensuring chemical safety (i.e. that disinfectants are used purposefully and correctly).

Crowded rooms contribute to the spread of viruses. Rooms must be aired and ventilated on a regular basis.

As viruses can spread from infected surfaces, rooms and surfaces must be wet-cleaned regularly. See the recommendations by the Health Board at: https://www.terviseamet.ee/et/COVID-19-trukised#JUHENDID (in Estonian).

Children are less prone to COVID-19 according to research and the Health Board. In spring, around 4% of COVID-19-positive persons were under 18 years old. Of those, less than a quarter were younger than 5 years old, a third were aged 5 to 11 and the rest aged 12 to 18.

It has been proven that the transmission of COVID-19 from one student to another in a school environment is rare, similarly to child to adult transmission. More information can be found on the ECDC website at https://www.ecdc.europa.eu/sites/default/files/documents/COVID-19-schools-transmission-August%202020.pdf (in Estonian).

Sick people must stay at home and in isolation if COVID-19 is suspected

In the case of respiratory symptoms such as cough, fever, sore throat or general feeling of weakness or tiredness, a person must stay at home and participation in learning organised from a distance. A person who has been in contact with a person who is COVID-19 positive must stay in self-isolation for 14 days.

In the case of a confirmed positive case of COVID-19 in a grade or group, all students who have been in contact with the infected must be transferred to distance learning. It is advised to transfer the whole grade or group to distance learning. The ill person must test negative or remain in isolation.

A person is subject to a 14-day restriction on freedom of movement when they arrive from a foreign country where the coronavirus infection rate is above 16. Educational institutions have the right to transfer such a student to distance learning. Current information about countries and their rates and restrictions is available on the website of the Ministry of Foreign Affairs of Estonia at https://vm.ee/en/information-countries-and-self-isolation-requirements-passengers.

Self-isolation is not required by those whose household includes members who are subject to a restriction on freedom of movement due to foreign travel or who have been in contact with a person who in turn has been in contact with a person who is COVID-19 positive.

Procedure when a person falls ill in an educational institution

An ill person must notify the institution’s management. When symptoms of illness appear, students must seek help from a teacher or the school nurse who in turn must notify the management and the student’s parents.

The person in question shall be isolated from others in a suitable room. They are given a surgical face mask (bearing in mind the proper use thereof). An ambulance must be called (by dialling 112) if the situation of the ill person worsens considerably.

A person who is COVID-19 positive or the parents of an infected student must notify the school’s management as soon the diagnosis is confirmed. It is crucial to stop the spread of COVID-19.
The management shall inform the members of the grade or group and their parents. The notification shall be discreet and considerate and shall not include any personal details.

The Health Board will contact the relevant educational institution in the case of a confirmed case of COVID-19 and determine the persons who have been in contact with the infected in cooperation with the institution and its nurse.

Persons who have been in close contact with the patient must self-isolate for 14 days, during which distance learning shall take place.

Participation in hobby activities and courses or visiting public places is prohibited during self-isolation.

Other students shall continue their daily lives while monitoring their health. In the case of COVID-19 symptoms, a person must contact their GP as soon as possible.

**Closure of the institution is decided by the manager and the Health Board**

The Health Board considers closing an educational institution if more than 10% of its students are COVID-19-positive. Closure usually means distance learning.

The Health Board provides general guidelines when a local spread of COVID-19 is detected in the school area. The guidelines are provided under the Communicable Diseases Prevention and Control Act. Under the same act, the management of the educational institution is allowed to close the institution in coordination with the Health Board.

The Health Board also has the right to order disinfecting or cleaning procedures in buildings as well as health check-ups and diagnosis of communicable diseases.

Orders related to restrictions that have a major impact on the society or economy are given by the Government of Estonia.

**Extra attention must be paid to mental health**

It is important to notice the need for support and offer it to both students and teachers.

School managers and head teachers play a central role in supporting teachers: co-vision, supervision and inclusion of external specialists, where necessary. It is also important for persons to pay attention to their own mental health and wellbeing.

Peaasi.ee provides essential information on mental health and basic support. Young people aged 16 to 26 can register for free counselling (also possible via a video call). Advice and help can also be sought from the Rajaleidja helpline (+372 735 0700).

The website teevi.ee helps raise awareness among young people on mental health topics.

The central child support helpline 116 111 provides 24/7 counselling.

Teachers must pay attention to maintaining contact with students during distance learning. Special attention must be paid to children and young people in risk groups. It is important to notice and react when a student presents unusual behaviour. The school psychologist can instruct teachers on what to pay attention to and when to ask for help.

One must not forget during distance learning that bullying can take place outside the school building or in cyberspace. Teachers and parents must pay attention to interactions on the Internet and remind students of the proper netiquette, if needed.

The Ministry has increased the financial support for organisations who prevent and raise awareness on bullying in order to guarantee all students a safe learning environment. The Ministry in cooperation with the Ministry of Social Affairs of Estonia has produced a mental health guidebook and is preparing an anti-bullying education guidebook.

Guidelines on how to address the topic of COVID-19 when talking to young people and children can be found at: https://www.hm.ee/et/uudised/10-soovitust-raakida-noor-tega-koroonaviruse-ohtlikkusest (in Estonian) and https://www.innove.ee/blogi/innove-raja-leidja-kuidas-raakida-lastega-koroonavirusest/ (in Estonian).
Pre-school education is organised by the manager
The organisation of the work of a pre-school education institution is up to its manager. The head of the institution shall map out the optimal solution with the local government. People exhibiting any symptoms are not allowed into the building.

Pre-school teachers or child care professionals have the right and the obligation to not allow children or parents with symptoms of illness into the building.

The effect of COVID-19 on children is usually mild; therefore, extra attention must be paid to monitoring their health.

As the closure of pre-school education institutions has a large effect on society, it is necessary to provide pre-school education even when the number of COVID-19 cases rises.

**Organisation of youth work is decided by the manager**

The manager is responsible for the organisation of youth activities, such as youth centres, hobby education schools, training groups and camps. The local organisation of youth activities, usually the local government, must be informed of all updates of the situation in such activities.

It is crucial to continue providing youth activities and support youth workers in order to provide support to young people in need.

Youth activities must follow similar procedures to other educational institutions and full closure shall be the last option. The key measures are to follow personal hygiene and pay attention to the dispersion of people. Work will be reorganised by building, institution or area, where needed, taking the local situation into consideration.

If an institution is closed, it is crucial to continue offering services and using solutions of smart youth work.

The Education and Youth Board and strategic partners funded by the Ministry of Education and Research are able to provide support.

**Upper secondary school state examinations take place in autumn**

Although high school leavers were not required to take exams in spring, it is possible to take them in this autumn. Passing a student research or practical project is not obligatory and the organisation of international exams has changed due to the state of emergency.

**Effect of COVID-19 and distance learning is being studied in 100 schools**

Tallinn University is analysing the effect of COVID-19 and distance learning on schools, teachers, students and parents.

The study addresses students with special needs, the availability of smart devices, changes in management and organisation of teaching as well as parents’ role in providing support.

**Government has initiated a number of COVID-19-related research studies**

Engaging researchers for better understanding and mitigating the impact of COVID-19 and the related crisis is crucial. The government has invested an additional 10 million euros in research and development activities.

The government has granted 1.6 million euros for COVID-19 monitoring research and 0.86 million euros for developing systems for advance warning. 1.5 million euros have been granted for establishing a biolaboratory at the University of Tartu. An additional 2.1 million euros will be allocated for COVID-19-related studies in an open application round.

**COVID-19 prevention app HOIA is released**

Starting from 20 August, the HOIA app, which serves as an additional way to map possible contacts and curb the spread of virus, is available to download. The app will warn a person when they have been in close contact with a person who is COVID-19 positive. More information can be found at [www.hoia.me](http://www.hoia.me).

**Trainings and internships are allowed in vocational education training**

Trainings, internships and practical work are not suitable for independent work or distance learning. If the training can be conducted, it is advised to do so.

Training must be supervised and given feedback and take place in a safe environment.

If a company is not able to provide training (e.g. owing to the temporary suspension of its activities or reorganisation), it is not possible to intern either. The company, the student and the school should consider alternative solutions together.
Digitalisation and innovation

**Digitalisation enabled Estonian schools to cope well during the state of emergency**

The crisis in spring highlighted the necessity of digital technology and the related digital competences. Estonia coped well with the transition to distance learning thanks to smart, consciously laid, strong groundwork — in recent years, great attention has been paid to the availability of digital tools and the development of digital competences, infrastructure, learning materials and services.

The various e-solutions in use before the crisis helped to continue teaching and learning, maintain communication between schools and homes and share experiences. The earlier decision to ensure free textbook duplicates — digital textbooks and workbooks — to Estonian children was a great help.

The use of digital textbooks and e-learning solutions increased dramatically this spring. Estonia’s ability to successfully switch to distance learning overnight sparked global interest, reinforcing Estonia’s image as a digital state.

The use of educational information systems multiplied during distance learning. Moodle learning environment and the Examination Information System (EIS) as well as HarID authentication solution, which allows people to log in to numerous educational e-services, increased their user bases. HarID is a secure solution that facilitates the use of educational e-services by educational workers, students and parents and enables IT specialists to manage users in schools and pre-schools. HarID currently enables users to access 15 educational e-services during one login session and more options will be added during this academic year.

The majority of Estonian children were satisfied with e-learning during the distance learning period. Only 10% expressed dissatisfaction. Compared with other countries, Estonian students had better access to digital tools: 80% of children deemed said access good. Additionally, the e-learning systems of schools were more accessible in Estonia than in other countries. 70% of respondents reported that they adopted or used new study methods and means of communication during distance learning. 80% of children felt safer during distance learning compared with classroom studies.

More than 200 basic school digital textbooks are available free of charge and can be accessed by children who study abroad.

The digital competences of Estonian teachers and students improved quickly. At the same time, the crisis highlighted the uneven development of digital competences. The Ministry continues to improve the latter with different programmes and activities.
Common e–environment helps students participating in distance learning
Schools must agree on e–environments where distance learning is conducted in order to avoid a situation where many environments are used simultaneously, making it difficult for students to navigate between them.

At the start of the new school year, it is important for schools to ensure that all teachers and students have access to the technology required for distance learning and an Internet connection in the required volume and bandwidth.

We recommend offering IT support to both participants in distance learning and parents who support their children’s studies.

Importance of digital textbooks is growing
Basic school digital textbooks are available to all schools, students and parents free of charge in the new school year.

The basic school digital textbooks programme launched in the 2018/2019 academic year was indispensable for many schools during the distance learning period in spring, allowing many Opiq and Foxcademy learning materials to be accessed free of charge. For instance, the opiq.ee platform, which gathers the learning materials of all major publishing houses, offers over 260 digital learning packages for free. The environment can also be accessed by school children studying abroad. Opiq materials can also be found in the E–koolikott environment, which provides central access to digital learning materials.

E–koolikott currently offers around 24,000 units of digital learning materials for general and vocational education. This includes digital learning materials for secondary school mathematics, social sciences, natural sciences and art courses from the digital learning collection created by Tallinn University (covering 66 courses of the national curriculum for secondary schools). The materials submitted to the digital learning materials competition organised for teachers in late spring can also be found on E–koolikott.

First digital textbooks published for students who follow a simplified curriculum
The first digital textbooks for children who study based on the simplified national curriculum of basic schools will be published by autumn.

The distance learning period highlighted the lack and poor availability of learning materials for students with special educational needs and new digital textbooks will help remedy the situation.

The textbooks are also suitable for foreign–language speaking students, differentiating studies or teaching on the basis of an individual curriculum. Compared with materials created on the basis of the regular curriculum, these textbooks feature easier topic treatment, simpler language, easier tasks, a clearer structure and larger fonts.

Teachers offered support with developing digital competences
Teacher training events introducing the most common learning environments, such as Moodle and Google Classroom, will continue: https://www.hitsa.ee/ikt-hariduses/kooltused. Web–based training programme Digivõti, which is specifically designed for subject teachers, allows teachers to improve the digital competences that are crucial specifically for subject teachers: https://www.hitsa.ee/ikt-hariduses/kooltused/digivoti).

The educational technology helpline for heads of schools offers help with preparing for distance learning and using the opportunities of digital technology. The hotline employee registers the schools that require help and, on the basis of this, schools are appointed advisers who are educational technologists. The hotline number is 608 0707 and the e–mail is ht–info@harno.ee.

Many e–learning environments required for organising distance learning, learning materials, information and experiences can be found in both Estonian and Russian on the e–learning FAQ page at https://www.hitsa.ee/e–ope–korduma–kippuvad–kusimused.

Klass+ programme supports schools upon offering innovative learning solutions
A new round of applications for the successful Klass+ learning materials sharing programme is announced for the coming school year, allowing schools to offer students innovative learning opportunities.

The programme supports the acquisition of innovative and contemporary learning materials to be used by at least three cooperating schools, mainly in the fields of natural and exact sciences. In addition to offering contemporary innovative learning opportunities, the programme facilitates cooperation between schools and makes studies more practical.

Digital graduation documents are also issued to graduates of vocational schools and institutions of higher education
If, by spring 2020, the possibility to obtain digital graduation documents certifying basic and secondary education was created, then by the end of the new school year, this will be extended to graduates of vocational schools and institutions of higher education. As of summer 2020, all people who graduated from a basic school or an upper secondary school in 2004 or later can view and download their graduation diploma data.
Four sectoral development plans for 2021-2035 underway in Ministry’s administrative area

The draft development plans for the 2021-2035 strategy of the Ministry of Education and Research have been prepared over the course of two years as a result of cooperation between the Ministry and the most important target groups and stakeholders in the field. Input has been provided by expert groups, development plan workgroups and various cooperation bodies.

The draft development plans for the fields of education and youth have been submitted to the Government and the Riigikogu for discussion. Work continues in relation to the drafts of the research and development, innovation and entrepreneurship development plan and the Estonian language development plan.

In parallel, the Government Office and the Ministry of Finance have led the preparation of the cross-sectoral strategy Estonia 2035, to which the Ministry of Education and Research as well as experts in the field and partner organisations have contributed.

According to the plan, development plans will be submitted to the Government for approval this autumn. Programmes for achieving the objectives of development plans, which set forth the measures, activities and investments required for fulfilling these plans, will be prepared for the new period by February 2021.

Draft development plans, the drafting process, the views of the partners and other materials can be viewed in the strategic planning section of the Ministry’s website at https://www.hm.ee/et/kaasamine-osalmine/haridus-ja-teadusstrateegia-aastateks-2021-2035.

The latest news on the development plans and references to documents can easily be found in the strategy creation newsletters, which everyone can subscribe to at https://www.hm.ee/et/kaasamine-osalmine/strateegiline-planeerimine-aastateks-2021-2035/infokiri.
0.5 billion euros to be allocated for achievement of objectives of development plans
The objectives set in development plans will be achieved using the structural fund resources for 2021–2027. In the area of government of the Ministry of Education and Research, the total volume planned by the structural funds amounts to 0.5 billion euros.

It is planned to use around 200 million euros of this for research and innovation. We maintain the high level of research and increase it further, ensure the quality of research infrastructure, support the development of centres of excellence for research, increase the social and economic effect of research and facilitate cooperation between companies, research institutions and institutions of higher education.

Around 50 million euros is invested in teachers and the development of learning environments. It is important to ensure a new generation of teachers, support specialists and heads of schools. The profession of teacher has become more popular and competition for spots in teacher training has increased in recent years. According to TALIS, teachers and heads of schools feel that the profession of teacher is more valued. The planned investments from the structural funds help ensure that working in education is reputable, that the career of new teachers is supported, that teachers know and use new technology and that smart learning materials and methodology are conducive to learning and help teach captivatingly and effectively.

Around 30 million euros is allocated for improving the Estonian language skills of people whose native language is not Estonian. The +1 teacher programme is also expanded in order to remedy the lack of teachers of Estonian as a second language and improve teachers’ readiness to work in a multilingual classroom. The development of popular e-learning environments continues.

Around 30 million euros is used to increase the social inclusion of children and young people and support children and young people in various situations. Attention is paid to the prevention of social exclusion risk among young people and improving competitiveness. The offering of support measures for NEETs and the development of educational support services continues.

Around 70 million euros is allocated for investing in the school network and learning environments.

Teaching profession is increasingly popular
In the 2019/2020 academic year, there were 15,843 general education teachers working in 13,216 positions, 1963 vocational school teachers working in 1317 positions and 7887 pre-school teachers working in 7645 positions in Estonia.

The number of teachers remains considerably larger than the number of teaching positions — in the last school year, over 40% of teachers worked part-time.

Record number of young people want to enter teacher training
The popularity of the profession of a teacher is increasing: this year, Tallinn University and the University of Tartu received a whopping 3879 applications in total, i.e. 500 applications more than last year.

There is great interest in session study specialities with pre-school education, special education and basic school teacher being the most popular. The number of entrance applications submitted for the speciality of a subject teacher in natural science grew by 50% compared with last year.
Eesti õpetajad on autonoomsed ja professionaalsed
In Estonian education, the professionality and high quality of teaching of the profession of a teacher is based on responsibility and autonomy. Teachers have a lot of freedom in making professional choices, including on learning materials and grading principles.

The autonomy and initiative of teachers does not only concern the opportunities and capability to instruct students in class, but also the management of processes outside the classroom by cooperating with other teachers, support specialists and parents.

Beginner’s allowance for teachers to be paid in one instalment
According to the amendment to the Basic Schools and Upper Secondary Schools Act that enters into force this autumn, the beginner’s allowance of 12,783 euros for new teachers and support specialists is to be paid in one instalment as of this September.

It was previously paid in three instalments. Payment of the allowance as a lump sum offers people starting their professional career more substantial support for making larger investments, which can help them continue working as a teacher for a longer period of time. The application can be submitted after completing professional studies and commencing work. Upon receiving the beginner’s allowance, teachers or support specialists are obligated to work in this position for five years.

New Occupational Qualification Standards for vocational school teachers
In spring, the Education Occupational Qualification Council approved the new occupational qualification standards for vocational school teachers, which pay extra attention to supporting the learning and development of students.

The competencies of a vocational teacher could previously be certified on levels 5-7 of the Estonian Qualifications Framework. The most important change involves the creation of an Occupational Qualification Standard for level 8 master teachers and a partial occupational qualification for practical work instructors in companies. The latter is important for ensuring both the quality of in-service training and the next generation of vocational school teachers by motivating good teachers from the entrepreneurship sector to join vocational schools.

The new Occupational Qualification Standards will become effective on 1 January 2021. The Occupational Qualification Standards serve as a basis for planning the degree studies and continuing education of vocational teachers. Applying for a qualification gives the teacher the opportunity to analyse their work and competence and supports both teachers and heads of schools in monitoring and supporting professional development.

Teachers and support specialists can apply for state education grants
The state education grant competition is announced for the third time in September. The competition is open for teachers and support specialists of pre-school children institutions, basic schools, upper secondary schools and vocational schools.

The grant is up to 11,000 euros and is meant to be used in 2021. The maximum use period is six months.

The grant is given on the basis of priority topics in the field of education, the applicant’s previous work experience and readiness to develop their professional competence, adherence to qualification requirements and the general applicability of the work done using the grant in the education system. The grant can be used for teaching and participating in practical training, preparing learning materials, continuing education abroad, etc.

Development programmes for teachers and education managers continue
September sees the second year of the development programme for local government education managers with up to three years of experience. Additionally, an innovative development programme is launched for education managers with long-term experience.

The programmes help increase the competence of education managers of local governments and their ability to implement changes on a local level.

The continuing education of teachers and heads of schools continues and is offered as distance learning, where necessary. One priority of continuing education is to increase the readiness of educational institutions to conduct studies as distance learning.
Long-term development programmes are also continued, the participants of which are selected via competition. For example, in August, for the sixth year, first-time heads of schools will commence studies supported by experienced heads of schools as mentors.

The popular inspiration programme for specialists who have thought about becoming a teacher as their next career choice continues as well.

As of spring 2021, everyone who has great management potential and wishes to prepare to become a head of school can apply for the young talent programme for headteachers.

**Hobby teacher category added to national awards**

In 2020, the national awards will include three life achievement awards of 65,000 euros and, for the first time, a national award of 10,000 for the hobby teacher of the year.

The addition of the hobby teacher category sends a message to the whole society that hobby teachers are acknowledged and valued and contributes to the appreciation of non-formal learning in general.

Every year, many worthy candidates are submitted for the lifetime achievement award and giving out up to three awards allows more people to be acknowledged and thanked for their years of work. Lifetime achievement and annual awards in ten categories are handed out at the Teacher of the Year gala on 3 October.
State supports development leap in Estonian language technology

The state strongly supports the development of Estonian language technology in order to improve the availability of operational multilingual information in Estonia.

The COVID-19 crisis in spring confirmed the importance of having quick access to precise information. In order to be ready to cope with next crisis, public sector machine translation is being developed first in order to add automatic Estonian subtitles to live broadcasts and recorded programmes of different television channels.

The possibilities of language technology help increase the speed at which multilingual information is presented to everyone, incl. to those whose native language is not Estonian. This concerns both messages from the Government and materials on COVID-19 translated from other languages. According to studies, machine translation is generally 15-20% quicker, but in the case of texts related to a very specific field — for instance COVID-19 — it can even be up to 40-50% quicker. Considering the advancement of technology, the efficiency of machine translation will improve even more over time.

According to the plan, machine translation technology will be ready next year and is going to be used in the state’s central machine translation environment. It can also be used separately — each institution can use it to translate their documents, websites, etc. The environment will be based on an analysis and a prototype commissioned by the Ministry of Education and Research, the Ministry of Justice and the Ministry of Economic Affairs and Communications.

Basic machine translation technology has been developed using the state language technology programme, but in order to translate public sector texts, there is a need to collect speciality corpuses and develop machine translation on the basis thereof. Minimalist technologies are also used, which allows for automatic transcription of spoken content and translating into the required language. Hence, Estonian subtitles will be added to live broadcasts and recorded programmes of different television channels.

We will improve the availability of information forwarded in Estonian to 90,000 persons who are hard of hearing and 1500 deaf persons.

The possibility to add automatic Estonian subtitles to live broadcasts and recorded programmes of different television channels will be available by next autumn.
The machine translation technology will be supplemented by speech technology, which allows automatic transcription, i.e. writing down oral speech and translating it to the necessary language. Public sector machine translation will be developed in as many language directions as possible, e.g. Estonian-English-Estonian, Estonian-Russian-Estonian and Estonian-German-Estonian.

Availability of information to persons who are hard of hearing or deaf will be ensured as another important development. There are 90,000 persons hard of hearing and 1500 deaf persons living in Estonia who are unable to follow most live broadcasts in Estonian.

The possibility to add automatic Estonian subtitles to live broadcasts and recorded programmes of different television channels will be developed by next summer. Subtitles make programmes easier to follow by people who are hard of hearing and the elderly and also in situations where the programme cannot be listened to for some reason. The service under development will allow users to switch on real-time Estonian subtitles using their TV remote. This new function will first be applied in relation to news, press conferences, election debates, etc. The subtitling project is led by the Ministry of Education and Research in cooperation with the Ministry of Economic Affairs and Communications, the Ministry of Culture and Estonian Public Broadcasting.

The state will allocate one million euros this year to develop machine translation technology. An additional 0.4 million euros is allocated for the subtitling project.

Increasingly more people use digital solutions for learning Estonian

More than 4000 people use Keeletee B1 level e-learning course for advanced Estonian learners, which was launched in full last September. The COVID-19 outbreak in spring increased the number of e-course users significantly.

Thanks to digital solutions, everyone can study Estonian free of charge anytime, anywhere.

Keeletee allows both English and Russian speakers to independently study Estonian, offering exercises for reading, writing and understanding texts. The e-course is free of charge and learners can ask help from Estonian teachers by e-mail. The number of e-mails sent to teachers doubled during the state of emergency.

Keeletee is the follow-up of the popular Estonian language course Keeleklikk (www.keeleklikk.ee), which allows users to study Estonian at A1 and A2 levels free of charge.

Professional development of teachers of Estonian as a second language and subject teachers is supported

This autumn, training is offered to both teachers of Estonian and other languages and subject teachers in order to improve the quality and efficiency of Estonian language teaching.

The University of Tartu organises training for teachers whose native or home language is not Estonian and who work in general education schools. Participants can improve their Estonian and develop the skills required for supporting students in acquiring Estonian as a language of instruction.

MTÜ Eesti Keelepööre offers training for primary school teachers of Estonian and other languages. The purpose of the training is to improve teachers’ methodical skills in teaching Estonian, facilitating the implementation of integrated subject and language teaching and creating electronical learning materials. The training is organised in cooperation with the UT Narva College and the Association of Teachers of Estonian as a Second Language.

Global School offers new courses

The Global School strengthens the ties between Estonia and Estonian children living elsewhere by providing the opportunity to acquire subjects in their native language. This school year, students in grades 1–9 can learn Estonian language and literature, Estonian history and civics and citizenship, Estonian geography and mathematics in a total of 28 e-courses.

The Global School also offers an Estonian language course for young people aged 16–26 in cooperation with the Estonian Worldwide Youth Network. Students can also participate in Skype classes and online meetings.

Preserving and developing Estonian language skills is crucial to make it easier for people to return to Estonia. The Global School helps develop and preserve the Estonian language skills of Estonian children living abroad, and courses based on the national curriculum prepare them for commencing studies in Estonia. In addition to curriculum courses, the school offers simplified Estonian language courses.

The studies of the Global School, which was launched and is operated with the support of the Ministry, are conducted in the Moodle environment. In the 2019/2020 academic year, the school had 250 students from 32 countries.
Education and Youth Authority established as a result of merging four institutions began work on 1 August
The joint authority was created on the basis of the Innove Foundation, the Archimedes Foundation, the Information Technology Foundation for Education and the Estonian Youth Work Centre and its main activity is implementing education and youth policy. At the same time, some activities of an applied nature were also transferred to the authority from the Ministry of Education and Research. As of 1 January 2021, the authority will also include the Erasmus+ Office. The merging of institutions increases cohesion between the Ministry’s areas of responsibility, makes work distribution clearer and more logical, reduces duplication and reduces costs.

As of 1 August, the Language Inspectorate is replaced with the Language Authority, which is tasked with monitoring adherence to both language skill requirements and the requirements of the Estonian literary standard in public spaces.
Pre-school, basic and secondary education

In the 2019/2020 academic year, Estonia had 614 pre-schools, including 131 pre-school child care institutions operating together with a school for general education. 93.9% of children aged 4–7 participated in pre-school education in 2019. Participation in pre-school education has remained at the same level in recent years.

In the last school year, Estonia had 530 schools for general education, including 53 basic schools, 309 9-grade schools, 131 secondary/upper secondary schools with a basic school level and 26 upper secondary schools, of which 16 were state upper secondary schools. There are 14 adult upper secondary schools operating in Estonia, but adult general education is provided in every county.

As of the last school year, there were 68 small upper secondary schools, i.e. those with fewer than 100 students (grades 10-12), including 43 with fewer than 50 students. There were 16 very small basic schools, i.e. schools with fewer than 30 students. The number of schools with grades 1-6 with fewer than 30 students was 33.

The estimated number of young people who will start year 10 is 8500 and around 7000 young people will start full-time studies in year 12. Approximately 23,000 students will start studying in upper secondary schools, i.e. years 10 to 12.

There were 4950 learners in general education in the 2019/2020 school year.
The number of children starting the first year of school will slightly decrease in the coming years, remaining at 14,200 instead of the 15,000 recorded in previous years. The number of students may reach 159,000 by 2024 and will then start decreasing again. This is still far from the late 1990s when more than 215,000 students studied in schools for general education. The changes vary regionally and the number of students grows mainly in Tartu and Harju counties.

**Draft Pre-school Education Act is underway**

The new act will make the pre-school organisation system more cohesive in order to support children’s readiness for school.

There are both pre-schools and child care institutions for pre-school children with different requirements and objectives. Parents often do not know the level of education that can be obtained in pre-schools or child care institutions. Parents expect high-quality pre-school education to be available and the smooth transition of children from pre-school to school.

The new Pre-school Education Act focuses on supporting the pre-school education of all children, incl. those at home, and offering pre-school advice for parents; making getting a pre-school place easier; supporting pre-school education based on the shared responsibility of local governments and pre-schools; the professionalism of teachers, assistant teachers and heads of pre-schools; the organisation of support measures and the learning and growing environment; and the harmonisation of the requirements of pre-schools and child care institutions as well as municipal and private pre-schools.

**Pilot programme for making Estonian language training more efficient expanded to include basic school classes in addition to pre-schools**

In the new school year, pilot project Professional Estonian Language Learning and Language Learning Models in Basic School will be launched in primary school classes. This is the further development of a project that has been successfully implemented in pre-schools of Tallinn and Ida-Viru County. This has brought dozens of additional Estonian-language teachers to groups whose language of instruction is Russian. In the 2020/2021 academic year, 50 new groups with Estonian-language teachers will be added to pre-school establishments.

The new project focuses on ensuring high-quality language teaching and piloting a variety of language teaching models. According to the plan, the Estonian language skills of participating students whose home language is not Estonian will reach A2 level by the end of year 3, whereas attention is paid to supporting the development of each child in multilingual classes. At the same time, the native language skills of both Estonian and foreign language speaking students are developed.

The project involves the research-based application of contemporary language teaching methods according to students’ needs, taking into account the children’s language levels developed in the Institute of the Estonian Language, testing assessment tools for linguistic development, analysing the organisation of studies, developing teachers’ self-analysis skills and offering basic school class teachers training on children’s linguistic development, multilingualism and early language learning.

Additionally, researchers of Tallinn University will begin a study whose purpose is to determine the factors that ensure the development of the native language and second language and the types of support required by schools and teachers.
Basic school graduates can take final examination in Estonian as a second language at B2 level

As of the new school year, basic school graduates are offered the opportunity to take a final examination in Estonian also at a higher level, i.e. B2 instead of B1, should they wish. This new opportunity supports students’ language learning motivation and helps avoid duplication of exams.

Previously, basic school students could only take the final examination in Estonian as a second language prescribed by the national curriculum at B1 level. Therefore, if a young person spoke Estonian at a higher level and even if they had a respective certificate, they had to take the final examination at B1 level in order to graduate from basic school. Now, however, students can take a level B1 examination together with basic school leavers in year 7 or 8 and a level B2 examination together with upper secondary school leavers in year 9. If a student does fail to pass the B2 level examination (i.e. they receive fewer than 60 points), they can graduate from basic school with the result of the B1 level examination taken earlier.

There will be a transition period this school year where students can take a B2 level examination at their initiative and submit the respective certificate to the school. In this case, the student does not have to take a final examination at B1 level in order to graduate from basic school.

Standard-determining tests in natural science and mathematics to take place in September for students in grades 4 and 7

These are new standard-determining tests that support studies, which are used to assess the acquisition of the general and field-specific competences, central topics and learning outcomes of the national curriculum.

The standard-determining tests are conducted in the EIS electronic environment.

PISA 2022 pilot test to take place in spring

The pilot test that was scheduled for this year was postponed until spring 2021 due to the coronavirus pandemic.

The main field of assessment of the test is mathematics. Aside from that, creative thinking is also tested. 68 schools (56 students from each school) participate in the pilot test. The data collected during the pilot test is used to prepare the PISA 2022 main test.

Two-way language immersion to move from pre-school to school

This year, on 1 September, the first two-way language immersion class in a municipal school will be opened in Tapa Russian Basic School.

The two-way language immersion class consists of Estonian and Russian-speaking children and the methodology allows the children to simultaneously develop both their native language and study another language. The children will spend half of their study time communicating with a teacher in one language and the second half communicating with another teacher in another language.

The development of the two-way language immersion programme began in Estonia in 2013. Last school year, four pre-school groups in Tartu, Pärnu, Tapa and Tallinn completed two-way language immersion. Avatud Kool private school also operates on the principle of two-way language immersion. To date, there have been no two-way language immersion classes in municipal schools.

Language immersion strategy for 2021–2026 is underway

The strategy serves as a basis for improving Estonian-language studies in Russian-language pre-schools and schools in educational institutions that have joined the language immersion network.

In the pre-schools and schools that have joined the language immersion programme, language studies are integrated with other activities and subject teaching. Joining the programme is voluntary for schools and pre-schools.

The network currently includes 37 general education schools and 70 pre-schools.
State supports local governments in organising school networks
Ten schools for general education can begin the new school year in contemporary conditions.

With state support, renovations or reconstructions were carried out at Taebla School, Võhma School, Priimetsa School, Järvakandi School, Puhja School, Alatskivi School, Haapsalu Basic School, Tabivere Basic School, Türi Basic School and Tondi Basic School in Tallinn.

The Government has approved the investment plan for two rounds of the basic school network organisation measure with in the total amount of 100.8 million euros. The Government supported 22 local government projects in the first round and 12 in the second round. As a result of the two rounds, around 104,812 m² of the areas of basic school will be modernised and the area of schools will reduce by approximately 91,000 m².

Establishment of state upper secondary schools continues
The construction of Saaremaa, Tabasalu, Paide and Laagri state upper secondary schools continues. The state upper secondary schools of Narva, Mustamäe and Pelguinn are being designed. After architectural competitions, the design work of Tõnismäe, Narva and Rae state upper secondary schools will also begin.

Saaremaa Upper Secondary School and Tabasalu Upper Secondary School have been established and will open their doors to students on 1 September 2021. Both schools have been elected headteachers, who will begin recruiting teams and creating content for the schools. Next, competitions will be held to find heads for Laagri Upper Secondary School and Rakvere Upper Secondary School. Studies will begin in these state upper secondary schools on 1 September 2022.

In the 2020/2021 academic year, students can study in 16 state upper secondary schools.
Cooperation project supporting development of school network begins
Weekly newspaper Õpetajate Leht will publish a series of articles on developments in the school network and future visions by region.

Contributions will be made by both local and central government experts. The purpose of the project is to empower local governments, increasing awareness in questions related to the school network and the field of education, and improve cooperation between local governments and the central government in organising the school network. Õpetajate Leht, the Association of Estonian Cities and Municipalities and the Ministry of Education and Research will contribute to the cooperation project.

Web-based handbook for updating work and salary organisation for teachers is underway
The handbook is above all designed for school managers, heads of schools, teachers and future teachers.

The handbook includes both expert knowledge and practitioners’ experiences. Among others, word will be given to education managers from eight local governments that have begun to modernise the organisation of teachers’ work and salary (Elva, Põlva, Rapla, Toila, Pärnu, Järva, Jõgeva, Saaremaa).

The presentation of the handbook is scheduled to take place in March 2021 during the Estonian Cities and Municipalities Days. This is a pilot project of the Association of Estonian Cities and Municipalities, the Ministry of Education and Research and OÜ Fontes Palgakonsultatsioonid.
Vocational education

In 2020/2021, 32 vocational schools and five state institutions of professional higher education providing vocational education also provide vocational formal education.

Around 24,000 students are studying in vocational education. The average age of learners in vocational education has increased significantly in recent years because there are new students aged 25 and over who wish to acquire a vocation or speciality and increase their competitiveness on the labour market. Although adult learners have as a rule acquired an education before (secondary or higher education), many of them study at level 4 vocational education, which requires basic education.

The number of students both starting and completing on-the-job training is increasing: in the 2019/2020 academic year, 1919 students completed apprenticeship training. The share of people who have completed on-the-job training of all vocational school graduates has also increased, reaching 12.4% by 2019.

Micro degrees in vocational education offer relief to labour market

In vocational studies, piloting the development and implementation of micro degrees begins. The purpose of this is to prepare short study modules that allow students to learn specific skills, the completion of which will allow the student to obtain a respective certificate and commence work.

The skills acquired can be taken into account in further studies when completing longer degree study curricula. Piloting begins in sectors that are currently suffering from the greatest lack of labour, such as the metal and construction industries.
Options for profession studies to expand to more than ten vocational schools
In vocational studies, piloting the development and implementation of micro degrees begins. The purpose of this is to prepare short study modules that allow students to learn specific skills, the completion of which will allow the student to obtain a respective certificate and commence work.

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Options for profession studies to expand to more than ten vocational schools
Options for profession studies offer students the opportunity to get a better sense of which field or speciality to study in the future. This also presents an opportunity to prepare for entrance tests more thoroughly if the student did not manage to get in to the desired speciality.

The curriculum allows the individualisation of the contents of the studies to a great degree, which is supported by consultation and cooperation with several regional companies and organisations.

The schools that offer the new options for profession studies are Rakvere Vocational School, Tallinn School of Service, Valga County Vocational Training Centre, Viljandi Vocational Training Centre, Tallinn Lasnamäe School of Mechanics, Räpina School of Horticulture, Võru County Vocational Training Centre, Tartu Vocational Education Centre, Vana-Vigala Technical and Service School, Järvamaa Vocational Education Centre and Haapsalu Vocational Education Centre. Kuressaare Vocational School, Tartu Art School and Pärnu County Vocational Education Centre will join at the beginning of 2021, provided that there is student interest.

Additional IT study opportunities in vocational education
This autumn, the first students will begin to study on the basis of a secondary vocational education curriculum in the speciality of IT system specialist developed in cooperation with the IT Academy programme, companies and universities.

Software developer speciality students are accepted for the second year. Both specialities pay extra attention to basic maths, Estonian and English skills. The study period is four years and, this autumn, students can commence studies in Tartu Vocational Education Centre, Tallinn Polytechnic School and Ida-Viru County Vocational Education Centre.

The objective of the IT Academy vocational education pilot programme is to increase the number of IT experts and create the conditions for continuing studies in an institution of higher education after obtaining secondary vocational education.

New module supports entrepreneurship and purposeful learning
The new vocational education module ‘Learning path and work in a changing environment’ is based on the ‘Edu ja tegu’ entrepreneurship education programme.

Based on the principles of life-long learning, the purpose of the module is to support the growth of self-awareness during studies in order to facilitate the planning of a professional career. The module is based on four components: individual learning path, understanding the environment, value creation and contributing to the society and a stance that values life-long learning.

A great number of vocational schools have integrated the new module into vocational education degree study curricula. Schools will adopt the module at the secondary vocational education level within a year.

Updates to European vocational education policy lines
The Council of Europe plans to adopt recommendations on the development of vocational education in the European Union, which will also extend to Estonia.

The key principles of updating vocational education policy are increasing the impact of vocational education in the education system and on lifelong education as a whole, continuing the modernisation of the contents of vocational education, increasing the importance of practical training, incl. apprenticeship and developing vocational education centres of excellence, the objectives of innovation, green economy and digitalisation and flexibility, practicality and student-centeredness.
Higher education and research

In the 2020/21 academic year, higher education is provided by a total of 18 educational institutions, including six public universities, one private university, seven state and four private institutions of professional higher education.

The number of university students in Estonia continues to decline. Compared with the situation six years ago, the decrease in admissions to BA studies (which is related to the overall decrease in the number of young people) has been particularly pronounced. The number of foreign students has increased in recent years, particularly in Masters and doctoral studies. Currently, it is not yet clear whether the increase will continue this academic year, owing to the global coronavirus pandemic and the measures applied to curb it.

Similar to other levels of education, the final admission figures of the year will become available in mid-November after all students have been enrolled and data entered in the Estonian Education Information System.

Rector elections provided institutions of higher education with both new and former heads

On 1 September this year, former Tallinn University Rector Tiit Land will assume the office of the Rector of Tallinn University of Technology. The Rector is elected for a term of five years.

The total number of students in the 2019/2020 academic year was 45,178, 5528 of whom were foreign students.

The duties of the Rector of Tallinn University will be performed until the election of the new rector in 2021 spring by Vice-Rector for Academic Affairs Priit Reiska.

The current Rector of TTK University of Applied Sciences and the current Rector of Pallas University of Applied Sciences Vallo Nuust will continue in their positions. The term of both rectors began on 1 August and will last for five years.

Updating Organisation of Research and Development Act begins

The Ministry has gathered proposals from research institutions for updating the act and organised inclusion events this autumn in order to specify and analyse matters related to changes. According to the plan, the act will be completed in spring 2021 and the updated act will enter into force in September 2022.
We support inclusion of researchers in development activities of companies and public sector institutions
We support companies and public sector institutions who wish to hire a researcher with a doctoral degree to deal with the development needs that require applied research or product development. The purpose of the support is to increase the research and development capability of Estonian institutions, diversify the career of a researcher and facilitate cooperation between research institutions and companies.

Resource refining programme has begun
The ResTa research programme supports companies’ needs-based research and development activities in refining wood, food and natural resources. The objective is to facilitate the capability of research groups in these fields and the growth of a new generation of specialists. In cooperation with entrepreneurs, the creation and adoption of innovative and knowledge-based solutions is expanded in fields important to Estonia.

State supports establishment of Tallinn Smart City Centre of Excellence
With the support of the European Union and the State of Estonia, Tallinn University of Technology will begin the establishment of the Smart City Centre of Excellence in cooperation with world’s top universities. The State of Estonia will co-fund the establishment of the centre from 2020 to 2027 with up to 17.2 million euros. The Centre of Excellence will develop and test smart solutions in Estonian cities in order to satisfy the development needs of cities in the fields of transport, energy, construction and architecture, data and government. This will also improve the capability of Estonian research institutions for participating in international networks and apply the results of cooperation projects based on the needs of the society and economy.

Proposals for improving doctoral studies in entrepreneurship published
The Ministry has prepared the new terms and conditions for supporting doctoral studies in the field of entrepreneurship and the concept of facilitating cooperation between companies and research institution as part of doctoral studies. Closer cooperation between doctoral students and companies increases companies’ capacity to apply research, patent creation and export and sales, while also providing skills and practical experiences to doctoral students and increasing their qualification on the labour market.
Adult education

Participation of adults aged 25–64 in lifelong learning has been constantly increasing over the years. In 2019, the rate of participation in lifelong learning reached 20.2% for the first time, with which we have achieved the goal set in the lifelong learning strategy. According to Eurostat, Estonia ranks 6th in Europe with this indicator. Around ten years ago, the participation rate in lifelong learning was below 10% in Estonia and around five years ago 12%. The state works towards increasing the number of people participating in lifelong learning. In order to continue this growth trend, there is a need to ensure access for adults to both degree studies and courses also in the future.

The proportion of adult learners (aged 25 and over) who commenced vocational studies increased in the 2019/2020 academic year compared with earlier figures. While in the 2018/2019 academic year, the proportion of students aged 25 and over was 39.6%, in the 2019/2020 academic year, this figure had increased to 41.7%.

The number of adults aged 30 and over in higher education has also slightly increased compared with previous years, amounting to 29.6% of students in the 2019/2020 academic year.

New opportunities added to distance learning in general education

As of the new academic year, general education can be obtained in the form of distance learning in Rakvere Vocational School and Võru County Vocational Education Centre. Haapsalu Vocational Education Centre offers this opportunity as of the last academic year.

Creating the opportunity for flexible general education even in vocational schools creates additional value for both general education and vocational education students. Optional courses allow students to get an overview of vocational education specialities or study general education subjects in depth in addition to professional training.
Free courses by institutions of higher education support adoption of new technology
This autumn, around 2000 adults will have the opportunity to improve their skills in institutions of higher education free of charge. In cooperation with institutions of higher education and experts in the field, 77 courses were selected, which support the adoption of new technology, help companies and organisations digitalise their products, services and business processes and facilitate the development of smart technology users. The volume of the courses is 40-160 academic hours and some courses can be completed in full online.

Free courses in vocational studies available to 5000 adults
In the second half of 2020, around 5000 adults will be able to refresh their professional skills by participating in free courses offered by vocational schools and institutions of professional higher education offering vocational education. The selection of courses is varied and study opportunities are offered in around 35 fields.

In relation to the state of emergency, online courses for acquiring the skills of an assistant welfare worker (250 participants) and for working with agricultural machinery (30 participants) were added. During the state of emergency, many courses transitioned from face-to-face learning to virtual learning. Many practical courses were postponed.

The courses held in vocational schools and institutions of professional higher education are above all designed for working adults who do not have any professional training or whose skills need updating.

The free courses offered by vocational schools and institutions of higher education are funded with the help of the European Social Fund in the total amount of 2.7 million euros. The list of free courses and details of the websites of the schools can be found at www.hm.ee/tasuta-kursused.

Free online courses in English available to up to 50,000 people Free international web-based courses are available to up to 50,000 people until the end of the year. Digital learning platform Coursera offers 4000 courses in English and Russian from universities and major companies around the world, at the end of which students can also obtain a respective certificate.

The selection includes courses that develop the general skills necessary in the future, such as digital literacy, project management or business English, but also more specific courses on, for example, cloud technology management skills, game development or medical neuroscience. Many courses offered by Coursera are from the field of information and communication technology. Registration for courses is open via the education portal until the end of September.

Quality assessment of continuing training institutions continues
According to the Estonian Education Information System, there are more than 1200 continuing training institutions in Estonia. Courses of varying quality are offered by many institutions. In order to improve the quality of refresher training, the Ministry has involved the Estonian Quality Agency for Higher and Vocational Education (EKKA), which pilots the quality assessment of continuing education institutions as of autumn 2019.

As of June 2020, 579 institutions of continuing education have been assessed, around half of which did not correspond to the requirements of the Adult Education Act. The requirements include, for example, publishing of information related to curricula and the organisation and quality of studies on the institution’s website in order to ensure the transparency of the training activity so that students or funders of training can choose a course that is best suited to their needs. The repeat assessment showed that a third of the institutions had not managed to bring their activities in line with the Adult Education Act. The quality assessment process continues, but based on the preliminary results, the Ministry is planning to initiate an amendment to the Adult Education Act.

The Ministry would like to urge all training clients and students to select the course carefully and read the curriculum and study terms and conditions beforehand.
New OSKA reports are underway
As part of the OSKA (coordination system for monitoring and forecasting labour needs and developing skills) programme, the Estonian Qualifications Authority analyses the skills and labour force necessary for the development of the Estonian economy in the next 10 years. By the end of 2020, all economic sectors are analysed and reports are published in the fields of public administration, finance and personal services. By the end of the year, an analysis is also prepared on the impact of the COVID-19 crisis on labour and skill requirements.

The Estonian Qualification Authority has also prepared an overview of field-specific ICT skills requirements, which showed that the importance of future skills has moved forwards in time and the development of digital and technology skills is of decisive importance in this.

On the basis of OSKA reports, practical tips for career development and useful information about future work and skills is gathered on the edu.ee education portal.

PIAAC international adult skills survey is under preparation
In 2020, the activities of the PIAAC survey were temporarily suspended due to the spread of COVID-19. The test survey, which was initially scheduled for spring 2020, was postponed for a year. Preparatory activities will resume in October and the PIAAC test survey is currently scheduled for spring 2021. According to the new schedule, the collection of data for the main survey is to take place between 2022-2023. The Ministry will conduct the survey in cooperation with Statistics Estonia.

When Estonia first participated in the PIAAC survey from 2011 to 2012, data were collected on around 8000 people aged 16-65. The survey results showed that Estonian adults stand out positively for their functional reading and maths skills. In both cases, Estonia’s results were above the average of the countries that participated in the survey. In the case of problem-solving skills in technology-rich environments, however, the results of Estonian adults were below the average of the participating countries..
Young people

Crisis support ‘Terve Eesti suvi’ allowed young people to have a summer full of activities

Until the beginning of July, organisers of short camps and work camps could apply for crisis support ‘Terve Eesti suvi’ in order to allow more young people to have a summer full of activities.

The support was aimed at short camps and work camps that offer activities for young people up to age 26, which involve youth work, including offering hobby education and activities, and work experience education.

The crisis support will reach around 24,000 children and young people via a variety of activities. 369 camp and work camp organisers received support in the total amount of 2.7 million euros.

Smart youth work gained momentum

The distance learning period in spring confirmed the importance of smart solutions in the inclusion of young people. Smart youth work has gained new momentum along with Nutivaramu, which offers information and inspiration for implementing smart solutions.

Nopik is a web environment that introduces good examples of cooperation between youth work and schools on diversifying studies. It is a practical tool for teachers, headteachers, youth workers, etc. who wish to improve cooperation between youth work and formal education.

National youth information portal Teeviit publishes a podcast series Teeviit tulevikku, where young people and experts talk about topics that are important and necessary for young people. The podcasts are published on YouTube, Spotify and Soundcloud. Each month, the podcast takes on a specific topic. For instance, the podcast focuses on physical health in September, mental health in October and the opportunities of youth work in November, when the Youth Work Week takes place. The December podcast will take a closer look at values.

The yearbook of youth monitoring Noorte elu avamata küljed (Undiscussed Facets of Young People’s Lives) is presented on a discussion conference on 7 October. The ninth yearbook no longer provides a statistical overview of indicators concerning the wellbeing of young people — this can now be found on the youth monitoring dashboard of Statistics Estonia — or focuses on one specific topic. The yearbook draws attention to a selection of topics that have not been sufficiently discussed in previous Estonian surveys in the field of young people.
Academic year in figures
2020/2021
Introduction

The number of students continues to grow in the coming years. The estimated number of students commencing full-time studies in general education schools in September is 155,000. The number of students may reach 159,000 by 2024. This is still far from the late 1990s when more than 215,000 students studied in schools for general education. The changes vary regionally and the number of students grows mainly in Tartu and Harju counties.

While the general number of students grows, the number of children starting first year is peaking and will decrease slightly in the coming years, remaining around 14,200 instead of the 15,000 noted in recent years.

Admission has been stable in vocational education over the past years and the average age of vocational education institution students has increased. Adult learners want to raise their competitive advantage on the labour market and acquire new skills.

The number of university students continues to decline. This is also due to both demographic changes (the number of people aged 18-24 and their share in the population is declining) and changes in education paths. The trend of taking a gap year after finishing upper secondary education and continuing in higher or vocational education after a couple of years is on the rise. This is also confirmed by the increasing average age of students (also people applying for higher education institutions) and the growing share of adults in vocational education. The number and proportion of foreign students has also increased.

Most changes in the general education school network are related to the reorganisation of school levels — this generally means that studies at the upper secondary level of municipal schools are terminated and the schools continue as basic schools due to the lack of young people. The number of 12-grade schools has therefore decreased, while the number of basic schools has increased.

The salary of teachers continues to increase and the state considers it important to raise the salary of pre-school teachers to the same level. At the same time, many teachers in general education schools work part-time (40% of teachers in the last school year). The continuing organisation of the school network should somewhat change this.

The exact student figures for the new school year will become clear by mid-November when schools and local governments have submitted the data to the Estonian Education Information System (EHIS).

Detailed indicators in the fields of education, science, young people and language can be found on the education statistics portal www.haridussilm.ee and analyses are available under the education data section on the Ministry’s website at https://www.hm.ee/et/tegevused/uuringud-ja-statistika-0.
Indicators of school and university students

**General education**
The total number of students entering or continuing full-time education in general education schools in the 2020/2021 academic year is around 155,000. According to the forecast, the number of full time students will continue to grow until 2024 and then start to decline slowly. It is estimated that by 2030, the number of students in general education will be almost the same as it is now.

Approximately 14,200 students will start in first year this year. Approximately 90,000 students will start in basic school years 1 to 6. Approximately 42,000 students will start in years 7 to 9.

The estimated number of young people who will start year 10 is 8500, and around 7000 young people will start full-time studies in year 12. Approximately 23,000 students will start studying in upper secondary schools, i.e. years 10 to 12.

Change in number of full time students in years 1, 10 and 12 (source: EHIS).

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</tr>
</thead>
<tbody>
<tr>
<td>Students in year 1</td>
<td>13,260</td>
<td>13,697</td>
<td>14,152</td>
<td>14,723</td>
<td>15,457</td>
<td>15,234</td>
<td>15,437</td>
<td>14,898</td>
<td>14,094</td>
</tr>
<tr>
<td>Students in year 10</td>
<td>8,566</td>
<td>8,127</td>
<td>7,846</td>
<td>7,406</td>
<td>7,588</td>
<td>7,966</td>
<td>8,053</td>
<td>7,988</td>
<td>8,156</td>
</tr>
<tr>
<td>Students in year 12</td>
<td>8,324</td>
<td>7,810</td>
<td>7,173</td>
<td>6,963</td>
<td>6,781</td>
<td>6,460</td>
<td>6,568</td>
<td>7,015</td>
<td>7,052</td>
</tr>
<tr>
<td>Total number of students</td>
<td>136,104</td>
<td>134,975</td>
<td>135,392</td>
<td>137,236</td>
<td>140,483</td>
<td>143,713</td>
<td>147,849</td>
<td>151,164</td>
<td>153,155</td>
</tr>
</tbody>
</table>

Estimated number of students 2020–2024 (Source: Statistics Estonia (table RV0212), EHIS).

<table>
<thead>
<tr>
<th>Class</th>
<th>2020/2021</th>
<th>2021/2022</th>
<th>2022/2023</th>
<th>2023/2024</th>
<th>2024/2025</th>
<th>2025/2026</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students in year 1</td>
<td>14,200</td>
<td>14,200</td>
<td>14,500</td>
<td>14,500</td>
<td>14,400</td>
<td>14,900</td>
</tr>
<tr>
<td>Total number of students</td>
<td>155,000</td>
<td>156,500</td>
<td>158,000</td>
<td>159,000</td>
<td>159,000</td>
<td>159,000</td>
</tr>
</tbody>
</table>
Vocational education

Around 24,000 students are studying in vocational education. The average age of learners in vocational education has increased significantly in recent years because there are new students aged 25 and over who wish to acquire a vocation or speciality and improve their competitiveness on the labour market. Although adult learners have as a rule acquired an education before (secondary or higher education), many of them study at level 4 vocational education, which requires basic education.

Number of vocational school students by study type (source: EHIS).

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</tr>
</thead>
<tbody>
<tr>
<td>Vocational education for persons without basic education</td>
<td>421</td>
<td>371</td>
<td>448</td>
<td>816</td>
<td>1120</td>
<td>1066</td>
<td>1183</td>
<td>1431</td>
</tr>
<tr>
<td>Vocational education after basic education</td>
<td>966</td>
<td>1005</td>
<td>2121</td>
<td>4660</td>
<td>6674</td>
<td>7520</td>
<td>8269</td>
<td>8668</td>
</tr>
<tr>
<td>Vocational secondary education</td>
<td>14152</td>
<td>13245</td>
<td>12420</td>
<td>11700</td>
<td>11308</td>
<td>10717</td>
<td>10027</td>
<td>9897</td>
</tr>
<tr>
<td>Vocational training after secondary education</td>
<td>10633</td>
<td>11078</td>
<td>10248</td>
<td>7731</td>
<td>5969</td>
<td>4840</td>
<td>3908</td>
<td>4021</td>
</tr>
<tr>
<td>Total</td>
<td><strong>26172</strong></td>
<td><strong>25699</strong></td>
<td><strong>25237</strong></td>
<td><strong>24907</strong></td>
<td><strong>25071</strong></td>
<td><strong>24143</strong></td>
<td><strong>23387</strong></td>
<td><strong>24017</strong></td>
</tr>
<tr>
<td>Share of students aged 25 and over</td>
<td>23,3%</td>
<td>26,3%</td>
<td>29,2%</td>
<td>31,9%</td>
<td>35,1%</td>
<td>36,7%</td>
<td>39,6%</td>
<td>41,7%</td>
</tr>
</tbody>
</table>

¹ Vocational education for persons without basic education = vocational education for persons without basic education + level 2 vocational education + level 3 vocational education.

Vocational education after basic education = vocational education after basic education + level 4 pre-training + level 4 continuing vocational education and training.

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

Vocational education after secondary education = vocational education after secondary education + level 5 pre-training + level 5 continuing vocational education and training.
Higher education
The number of students is expected to decrease further. Compared with the situation six years ago, the decrease in admissions to BA studies, which is related to the overall decrease in the number of young people, has been particularly pronounced. The number of foreign students continues to increase, particularly in Master’s and doctoral studies. Similar to other levels of education, the final admission figures of the new academic year will become available in mid-November after all students have been enrolled and data entered in the Estonian Education Information System.

### Number of higher education students by form of study (source: EHIS).

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</tr>
</thead>
<tbody>
<tr>
<td>Professional higher education</td>
<td>20 233</td>
<td>17 878</td>
<td>15 749</td>
<td>14 235</td>
<td>13 414</td>
<td>12 900</td>
<td>12 601</td>
<td>11 967</td>
</tr>
<tr>
<td>Bachelor’s studies</td>
<td>24 525</td>
<td>22 661</td>
<td>20 550</td>
<td>18 899</td>
<td>16 849</td>
<td>16 059</td>
<td>15 830</td>
<td>15 707</td>
</tr>
<tr>
<td>Integrated Bachelor’s and Master’s studies</td>
<td>3 949</td>
<td>3 731</td>
<td>3 589</td>
<td>3 344</td>
<td>3 308</td>
<td>3 172</td>
<td>3 189</td>
<td>3 222</td>
</tr>
<tr>
<td>Master’s studies</td>
<td>13 055</td>
<td>12 746</td>
<td>12 423</td>
<td>11 781</td>
<td>11 588</td>
<td>11 533</td>
<td>11 783</td>
<td>11 966</td>
</tr>
<tr>
<td>Doctoral studies</td>
<td>3 044</td>
<td>2 982</td>
<td>2 903</td>
<td>2 833</td>
<td>2 634</td>
<td>2 490</td>
<td>2 412</td>
<td>2 316</td>
</tr>
<tr>
<td>Total</td>
<td>64 806</td>
<td>59 998</td>
<td>55 214</td>
<td>51 092</td>
<td>47 793</td>
<td>46 154</td>
<td>45 815</td>
<td>45 178</td>
</tr>
</tbody>
</table>

### Number of foreign students at level of higher education by type of study (source: EHIS).

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<tbody>
<tr>
<td>Professional higher education</td>
<td>68</td>
<td>122</td>
<td>204</td>
<td>340</td>
<td>387</td>
</tr>
<tr>
<td>Bachelor’s studies</td>
<td>1 568</td>
<td>1 566</td>
<td>1 701</td>
<td>1 740</td>
<td>1 777</td>
</tr>
<tr>
<td>Integrated Bachelor’s and Master’s studies</td>
<td>278</td>
<td>286</td>
<td>295</td>
<td>322</td>
<td>328</td>
</tr>
<tr>
<td>Master’s studies</td>
<td>1 223</td>
<td>1 568</td>
<td>1 768</td>
<td>2 129</td>
<td>2 445</td>
</tr>
<tr>
<td>Doctoral studies</td>
<td>339</td>
<td>375</td>
<td>426</td>
<td>516</td>
<td>591</td>
</tr>
<tr>
<td>Total</td>
<td>3 476</td>
<td>3 917</td>
<td>4 394</td>
<td>5 047</td>
<td>5 528</td>
</tr>
</tbody>
</table>

### Number of students enrolled in higher education by study level (source: EHIS).

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</thead>
<tbody>
<tr>
<td>Professional higher education</td>
<td>4 858</td>
<td>3 806</td>
<td>3 604</td>
<td>4 020</td>
<td>3 962</td>
<td>3 683</td>
<td>3 590</td>
<td>3 297</td>
</tr>
<tr>
<td>Bachelor’s studies</td>
<td>6 487</td>
<td>6 059</td>
<td>5 139</td>
<td>5 312</td>
<td>5 120</td>
<td>5 150</td>
<td>5 149</td>
<td>5 012</td>
</tr>
<tr>
<td>Integrated Bachelor’s and Master’s studies</td>
<td>703</td>
<td>609</td>
<td>632</td>
<td>627</td>
<td>630</td>
<td>647</td>
<td>696</td>
<td>652</td>
</tr>
<tr>
<td>Master’s studies</td>
<td>4 006</td>
<td>3 860</td>
<td>3 913</td>
<td>4 032</td>
<td>4 223</td>
<td>4 027</td>
<td>4 349</td>
<td>4 392</td>
</tr>
<tr>
<td>Doctoral studies</td>
<td>405</td>
<td>396</td>
<td>374</td>
<td>380</td>
<td>364</td>
<td>361</td>
<td>397</td>
<td>343</td>
</tr>
<tr>
<td>Total</td>
<td>16 459</td>
<td>14 730</td>
<td>13 662</td>
<td>14 371</td>
<td>14 299</td>
<td>13 868</td>
<td>14 181</td>
<td>13 696</td>
</tr>
</tbody>
</table>
Adult education
Since 2009, adult participation in lifelong learning has exceeded 10%.

Last year (2019), 20.2% of adults aged 25-64 participated in lifelong learning.²

There were 5579 learners in general education in the 2019/20 academic year, which is slightly more than the previous year.

The proportion of adult learners (aged 25 and over) who commenced vocational studies increased in 2019/2020 compared with the previous year: The share of students aged 25 and over was 39.6% in 2018/2019 and had increased to 41.7% in 2019/2020.

The number of students aged 30 and over in higher education has been in decline since the 2011/2012 academic year, but has started to rise in recent years, amounting to 29.6% of all university students in 2019/2020.

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

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</thead>
<tbody>
<tr>
<td>Distance learners in general education*</td>
<td>5 970</td>
<td>5 075</td>
<td>5 279</td>
<td>5 377</td>
<td>5 448</td>
<td>5 428</td>
<td>5 486</td>
<td>5 579</td>
</tr>
<tr>
<td>Adult learners (25+) in general education</td>
<td>1 543</td>
<td>1 437</td>
<td>1 631</td>
<td>1 648</td>
<td>1 616</td>
<td>1 714</td>
<td>1 744</td>
<td>1 783</td>
</tr>
<tr>
<td>Adult learners (25+) in vocational education</td>
<td>6 101</td>
<td>6 770</td>
<td>7 366</td>
<td>7 933</td>
<td>8 801</td>
<td>8 866</td>
<td>9 259</td>
<td>10 007</td>
</tr>
<tr>
<td>Adult learners (30+) in higher education</td>
<td>14 062</td>
<td>13 623</td>
<td>13 076</td>
<td>12 611</td>
<td>12 280</td>
<td>12 474</td>
<td>13 067</td>
<td>13 362</td>
</tr>
</tbody>
</table>

² 20% of distance learners are 17 or younger.

Share (%) of people aged 25-64 who participated in formal education or training in the preceding four weeks (source: Eurostat).

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<tbody>
<tr>
<td>Estonia</td>
<td>6.5</td>
<td>7.0</td>
<td>9.7</td>
<td>10.5</td>
<td>11</td>
<td>11.9</td>
<td>12.8</td>
<td>12.6</td>
<td>11.6</td>
<td>12.4</td>
<td>15.7</td>
<td>17.2</td>
<td>19.7</td>
<td>20.1</td>
</tr>
<tr>
<td>EU average</td>
<td>9.6</td>
<td>9.4</td>
<td>9.5</td>
<td>9.5</td>
<td>9.3</td>
<td>9.1</td>
<td>10.7</td>
<td>10.8</td>
<td>10.8</td>
<td>10.8</td>
<td>10.9</td>
<td>11.1</td>
<td>11.3</td>
<td></td>
</tr>
</tbody>
</table>

² The participation of adults in lifelong learning is measured as participation in a school or course in the four weeks preceding the survey (among people aged 25-64). The indicator is ascertained with the Estonian Labour Force Survey.
Indicators of teachers

Number of teachers by educational institution
The number of teachers remains considerably higher than the number of teaching positions, which shows that a remarkably large share of teachers work part-time.

Number of teachers and teaching positions in previous 3 2019/20 academic year (source: EHIS).

| Number of teachers in general education schools | 15843 | Number of general education teaching positions | 13 216 |
| Number of teachers in vocational schools | 1 963 | Number of teaching positions in vocational schools | 1 317 |
| Number of pre-school teachers | 7 997 | Number of pre-school teaching positions | 7 645 |

Indicators of general education teachers
Both the minimum monthly salary of teachers of municipal schools and the average gross monthly salary has nearly doubled since 2011. In the last five years (2015 vs 2019), the minimum monthly salary of municipal school teachers and the average gross monthly salary has increased by 39%, i.e. at the same pace.

Average gross monthly salary and minimum monthly salary of teachers compared with average national wage in Estonia (source: Trial balance, EHIS).

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</tr>
</thead>
<tbody>
<tr>
<td>Average gross salary of municipal school teacher</td>
<td>797€</td>
<td>812€</td>
<td>930€</td>
<td>1025€</td>
<td>1135€</td>
<td>1206€</td>
<td>1289€</td>
<td>1478€</td>
<td>1579€</td>
</tr>
<tr>
<td>Minimum monthly salary of teacher</td>
<td>644€</td>
<td>644€</td>
<td>715€</td>
<td>800€</td>
<td>900€</td>
<td>958€</td>
<td>1050€</td>
<td>1150€</td>
<td>1250€</td>
</tr>
<tr>
<td>Average national gross monthly salary (Statistics Estonia)</td>
<td>839€</td>
<td>887€</td>
<td>949€</td>
<td>1005€</td>
<td>1065€</td>
<td>1146€</td>
<td>1221€</td>
<td>1310€</td>
<td>1407€</td>
</tr>
<tr>
<td>Average gross salary of municipal school teacher as a share of Estonian average gross salary</td>
<td>95%</td>
<td>92%</td>
<td>98%</td>
<td>102%</td>
<td>107%</td>
<td>106%</td>
<td>106%</td>
<td>113%</td>
<td>112%</td>
</tr>
</tbody>
</table>

The ratio of teaching positions and students is very low — in recent academic years, it has been approximately 12 students per teaching position. 20 or more years ago this was up to 19 students per teaching position. A slight increase in the ratio of students and teaching positions can be observed in the last five academic years since 2012/2013, when the ratio was the lowest of the period included in the table below.

In the last academic year (2019/2020), the number of both teachers and teaching positions had increased in comparison with the previous year. However, the average workload of teachers for the last eight academic years has been 0.83 positions, i.e. the change in the number of teachers and teaching positions has had almost no impact on the average workload. Many general education school teachers work part-time. The TALIS 4 survey (focusing on 7th to 9th year teachers) shows that many teachers who are working part-time would like to work full-time. The organisation of work in a school depends

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3 The number of teaching positions means the number of full-time teaching positions.
4 TALIS (The Teaching and Learning International Survey) is an international survey assessing teaching and learning conducted by the OECD (Organisation for Economic Co-operation and Development). The study gathers data on teachers, teaching, the learning environment and teachers’ work conditions.
on the headteacher’s HR policy and the school manager’s school network policy. The TALIS\(^5\) survey (focusing on 7th to 9th year teachers) shows that many teachers who are working part-time would like to work full-time.

The organisation of work in a school depends on the headteacher’s HR policy and the school manager’s school network policy.

Change in number of teachers and students. The number of students by change can be found in the general education section (source: EHIS).

<table>
<thead>
<tr>
<th>Academic year</th>
<th>Number of teachers</th>
<th>Number of teaching positions</th>
<th>Number of students in full-time education</th>
<th>Number of students in full-time and part-time education</th>
<th>Number of students per teaching position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998/1999</td>
<td>16 919</td>
<td>12 960</td>
<td>217 577</td>
<td>223 660</td>
<td>17,3</td>
</tr>
<tr>
<td>1999/2000</td>
<td>18 434</td>
<td>14 324</td>
<td>215 841</td>
<td>222 200</td>
<td>15,5</td>
</tr>
<tr>
<td>2000/2001</td>
<td>18 278</td>
<td>14 050</td>
<td>212 184</td>
<td>218 555</td>
<td>15,6</td>
</tr>
<tr>
<td>2004/2005</td>
<td>15 974</td>
<td>13 864</td>
<td>183 951</td>
<td>190 879</td>
<td>13,8</td>
</tr>
<tr>
<td>2005/2006</td>
<td>15 827</td>
<td>13 670</td>
<td>173 822</td>
<td>180 963</td>
<td>13,2</td>
</tr>
<tr>
<td>2006/2007</td>
<td>15 183</td>
<td>13 003</td>
<td>164 024</td>
<td>170 994</td>
<td>13,2</td>
</tr>
<tr>
<td>2007/2008</td>
<td>15 039</td>
<td>12 845</td>
<td>155 071</td>
<td>161 961</td>
<td>12,6</td>
</tr>
<tr>
<td>2008/2009</td>
<td>14 682</td>
<td>12 452</td>
<td>147 519</td>
<td>154 481</td>
<td>12,4</td>
</tr>
<tr>
<td>2009/2010</td>
<td>14 701</td>
<td>12 203</td>
<td>141 802</td>
<td>149 641</td>
<td>12,3</td>
</tr>
<tr>
<td>2010/2011</td>
<td>14 394</td>
<td>11 970</td>
<td>138 448</td>
<td>145 939</td>
<td>12,2</td>
</tr>
<tr>
<td>2011/2012</td>
<td>14 263</td>
<td>11 902</td>
<td>136 104</td>
<td>142 938</td>
<td>12,0</td>
</tr>
<tr>
<td>2012/2013</td>
<td>14 203</td>
<td>11 882</td>
<td>134 975</td>
<td>140 945</td>
<td>11,9</td>
</tr>
<tr>
<td>2013/2014</td>
<td>14 226</td>
<td>11 739</td>
<td>135 392</td>
<td>140 467</td>
<td>12,0</td>
</tr>
<tr>
<td>2014/2015</td>
<td>14 329</td>
<td>11 680</td>
<td>137 256</td>
<td>142 515</td>
<td>12,2</td>
</tr>
<tr>
<td>2015/2016</td>
<td>14 409</td>
<td>11 820</td>
<td>140 483</td>
<td>145 860</td>
<td>12,3</td>
</tr>
<tr>
<td>2016/2017</td>
<td>14 581</td>
<td>12 067</td>
<td>143 713</td>
<td>149 161</td>
<td>12,4</td>
</tr>
<tr>
<td>2017/2018</td>
<td>14 905</td>
<td>12 372</td>
<td>147 849</td>
<td>153 277</td>
<td>12,4</td>
</tr>
<tr>
<td>2018/2019</td>
<td>15 465</td>
<td>12 852</td>
<td>151 164</td>
<td>156 650</td>
<td>12,2</td>
</tr>
<tr>
<td>2019/2020</td>
<td>15 483</td>
<td>13 216</td>
<td>153 155</td>
<td>158 734</td>
<td>12,0</td>
</tr>
</tbody>
</table>


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</thead>
<tbody>
<tr>
<td>&lt;0,5</td>
<td>17,3%</td>
<td>16,6%</td>
<td>16,7%</td>
<td>16,8%</td>
<td>16,5%</td>
</tr>
<tr>
<td>0,5-0,99</td>
<td>27,2%</td>
<td>27,0%</td>
<td>25,6%</td>
<td>25,4%</td>
<td>25,2%</td>
</tr>
<tr>
<td>1</td>
<td>48,7%</td>
<td>47,0%</td>
<td>49,0%</td>
<td>48,1%</td>
<td>48,8%</td>
</tr>
<tr>
<td>&gt;1,0</td>
<td>6,8%</td>
<td>9,3%</td>
<td>8,7%</td>
<td>9,7%</td>
<td>9,5%</td>
</tr>
</tbody>
</table>

TALIS (The Teaching and Learning International Survey) is an international survey assessing teaching and learning conducted by the OECD (Organisation for Economic Co-operation and Development). The study gathers data on teachers, teaching, the learning environment and teachers’ work conditions.
Number and size of schools

Pre-schools
In the 2019/2020 academic year, Estonia had 614 pre-schools, including 131 pre-school child care institutions operating together with a school for general education. 93.9% of children between the ages of 4 and 7 participated in pre-school education in 2019. Participation in pre-school education has remained at the same level in recent years.

General education schools
There were 530 general education schools in Estonia in the previous academic year, incl.

» 53 basic schools with grades 1-6
» 306 basic schools with grades 1-9
» 157 so-called pure secondary schools/upper secondary schools with a basic school level (i.e. grades 1-12 and 10-12)
» including 26 so-called pure upper secondary schools, of which 16 were state upper secondary schools (only grades 10-12)
» 14 upper secondary schools for adults

As of the last school year, there were 68 small upper secondary schools with fewer than 100 students (grades 10-12), including 43 with fewer than 50 students.

There were 16 very small basic schools, i.e. schools with fewer than 30 students. The number of schools with grades 1-6 with fewer than 30 students was 33.

Institutions providing vocational education
In the 2020/2021 academic year, 32 vocational schools and five state institutions of professional higher education providing vocational education will also provide vocational formal education.

The 32 vocational schools include:

» 26 state vocational schools
» 4 private vocational schools
» 2 municipal vocational schools

Institutions of higher education
In the 2020/21 academic year, higher education will be provided by a total of 18 educational institutions, including:

» 6 universities in public law
» 1 private university
» 7 state and 4 private institutions of professional higher education
**Hobby schools and youth centres**

The number of hobby schools has increased considerably over time, and the number of registered hobby schools has continued to grow in recent years. The statistics on academic years given in the table only reflect the number of hobby schools that have confirmed their details for the given academic year in the Estonian Education Information System in time.

### Hobby schools and youth centres by year (source: HARNO).

<table>
<thead>
<tr>
<th>Academic year</th>
<th>10/11</th>
<th>11/12</th>
<th>12/13</th>
<th>13/14</th>
<th>14/15</th>
<th>15/16</th>
<th>16/17</th>
<th>17/18</th>
<th>18/19</th>
<th>19/20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hobby schools</td>
<td>410</td>
<td>416</td>
<td>527</td>
<td>562</td>
<td>591</td>
<td>625</td>
<td>597</td>
<td>651</td>
<td>750</td>
<td>782</td>
</tr>
<tr>
<td>Open youth centres</td>
<td>210</td>
<td>210</td>
<td>227</td>
<td>237</td>
<td>246</td>
<td>247</td>
<td>263</td>
<td>281</td>
<td>280</td>
<td>281</td>
</tr>
<tr>
<td>Hobby schools per 1000 young people</td>
<td>1,29</td>
<td>1,34</td>
<td>1,74</td>
<td>1,9</td>
<td>2,03</td>
<td>2,2</td>
<td>2,1</td>
<td>2,33</td>
<td>2,71</td>
<td>2,83</td>
</tr>
<tr>
<td>Open youth centres per 1000 young people</td>
<td>0,66</td>
<td>0,68</td>
<td>0,75</td>
<td>0,8</td>
<td>0,85</td>
<td>0,87</td>
<td>0,93</td>
<td>1,01</td>
<td>1,01</td>
<td>1,02</td>
</tr>
</tbody>
</table>
Changes in general education school network, vocational education and higher education between 2019/2020 and 2020/2021

Most of the changes in the school network concern the reorganisation or merging of schools.

**Mergers of schools**
Keila School is merged with Keila Basic School, Kose Upper Secondary School is merged with Kosejõe School and Paldiski Upper Secondary School with Paldiski Basic School. All of the merged schools (Keila Basic School, Kosejõe School, Paldiski Basic School) terminate their activities as separate schools.

**Changes among private schools**
No new private schools are added in the 2020/2021 academic year.

Several private schools have applied for extra permits for organising studies at new school levels. Tartu Catholic Education Centre will begin to operating at the upper secondary school level in addition to the pre-school and basic school levels. Edu Valem Private School in Tallinn will also start operating at the upper secondary school level in addition to basic school level. The International School of Tallinn obtained an operating permit to organise studies under the IB Primary Years Programme (PYP) curriculum.

Lilleoru Basic School (in Rae Municipality) and Luce School (in Saaremaa Municipality) will add a second school level, i.e. grades 4-6, and St Peter’s Lutheran School of Tartu (in Põlva Municipality) will add the third school level, i.e. grades 7-9.

Krabi School (whose operating permit was declared invalid) and Mattias Basic School (whose manager terminated the activities of the school) ceased operating.

**Mergers of schools with pre-schools**
Tsirguliina School, Raasiku Basic School and Surju Basic School will be merged with pre-schools and the schools will continue to operate as pre-schools and basic schools. Kolga-Jaani Basic School will also be merged with a pre-school, thus establishing a new educational institution that will continue to operate as a pre-school and basic school.

**Termination of activities of schools and lowering school level**
Kavastu Primary and Pre-school will cease operating as a school and continue only as a pre-school. Sonda School terminates the activities of the second school level.

**Closures of upper secondary school levels**
Pääsküla School in Tallinn will terminate activities of the upper secondary school level and continue as a basic school.

**Closures of schools**
Libatse Pre-school and Primary School, Põlula School, Rakvere Adult Upper Secondary School and Võru Adult Upper Secondary School will terminate their activities.

**Openings of new schools**
A new municipal school, Kindluse School, will be opened in Rae Municipality.

**Transfers of school management**
The Ministry of Education and Research transfers the management of Kallemäe School to Saaremaa Municipality.

**Impending reorganisation announced by local governments**
Nõva School terminates activities of the third school level (as of the 2021/2022 school year).

Muraste School wishes to start organising studies at the third school level (as of the 2021/2022 school year).

**Changes in institutions offering vocational and higher education**
The teaching rights of the Euroacademy expire on 31 August and as of the academic year 2020/21 it will not offer studies at higher education level anymore.

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6 As the notice period is five months prior to reorganisation, in some cases, the local government may have made its decision but not yet officially informed the state.
Summary of analysis of performance of development plans and programmes of Ministry of Education and Research in 2019
The summary of the analysis of the performance of the development plans and programmes of the Ministry of Education and Research in 2019 involves an assessment of the achievement of strategic objectives and an in-depth analysis of the key topics in Estonian education.

In 2017, the focus was on the five strengths of Estonian education: good skills, raising the salary of teachers, participation in youth work, learning STEM subjects in Estonian higher education and foreign students in Estonian institutions of higher education. In 2018, we focused on the learning paths of people with basic school and general education. In 2019, the indicator-based performance report was supplemented with a part addressing in detail the acknowledgement and support of talented learners in the education system and the trends in teaching staff turnover. In 2020, we continue analysing teachers on the basis of EHIS data with an additional focus on the performance of doctoral graduates, smart specialisation in higher education studies and the professional engagement of graduates.
The good news in the field of education is that the employment numbers and salaries of graduates of both higher education and vocational education are increasing. This indicates a demand for qualified specialists on the labour market. Adult participation in lifelong learning continues to increase and there are increasingly more people with lower education among adult learners. The fact that the share of people without specialist and professional training is in slow but steady decline is also positive. In accordance with labour needs, development in higher education has been focused mainly on ICT, the number of graduates of which is increasing. The number and share of foreign students is also growing rapidly, particularly in doctoral studies. The average gross monthly salary of teachers of general education schools has increased more quickly than the Estonian average wage, but the proportion in relation to the average wage has not increased anymore in the last year — in 2019, the average monthly salary of teachers formed 112% of the Estonian average wage. In 2019, the results of a PISA test taken a year earlier were published, which once again confirmed the high quality of Estonian basic education. In the PISA 2018 ranking of European countries, Estonian young people aged 15 achieved first place in reading, maths and natural sciences alike. Globally, our students rank fifth in reading, eighth in maths and fourth in natural sciences.

The greatest challenges are the ageing of teachers and the resultant increase in the lack of teachers. High dropout rates in both higher and vocational education, the large share of young people with a low level of education who are not studying, the insufficiency of support services at various levels of education and the achievement of sufficient Estonian skills as a second language by the end of basic school continue to be a problem. The results of the 2018 PISA test confirm that the results of Estonian-language and Russian-language schools have not reached the same level. Additionally, the current educational system is characterised by excessive rigidity at times and study organisation that is based on the logic of linear education paths, which does not take into consideration the needs of today’s learners, who are often more mature and experienced and more certain in their choices and wishes, or allow for quick adjustment to the needs and requirements of the rapidly changing labour market.

When assessing the current situation of the youth field, it is important to bear in mind that the number and share of young people (aged 7-26) among the population is on the decline. The number of young people living in Estonia in early 2012 was around 303,000, but it had dropped to 275,879 by early 2019. According to the forecasts of Statistics Estonia, the share of young people among the total population will continue to decrease until 2020. Although the migration balance has been positive over the past years, incl. among younger age groups, the number of young people will not spike any time soon.

The number of young people not in education, employment or training (NEETs aged 15-29) has decreased considerably compared with 2010 (31.6% in 2000; 9.8% in 2019). This age group is estimated to include more than NEETs 20,000 in Estonia. Regional differences, e.g. the 16.4% share of NEETs in northeast Estonia, are worrying, whereas regional gaps have increased in the last year. In Tallinn, the share of NEETs was only 6.3%.

It is positive that youth participation in youth work is on the rise and the level of contentment is high. The competence of youth workers is also improving and the wider acknowledgement of the occupational qualification standard and the acquisition of more diverse methodologies have helped youth workers better perform their roles.

There are several indicators in research that reflect the good level of the work of Estonian research, but its development continues to be curbed by insufficient funding. A functioning and developing system of research, development and innovation (hereinafter referred to as RDI) has been developed in Estonia based on quality competition. The activity of international cooperation of researchers is growing along with publishing activity, which indicates a high level of research as well as the success of the EU’s research and development (hereinafter referred to as R&D) Horizon programme. The number of doctoral degree defences has been in slight decline since 2017, but considering the decrease in admission numbers as of the 2013/2014 academic year, a slight decrease in the number of defences is expected. Estonia is increasingly attractive to foreign scientists, whose number in Estonian public research institutions has risen steadily.
The greatest challenges for the research field are the greater involvement of companies in the activities of research and development activities and research financing. Estonia is characterised by a high level of project-based activities and a major share of foreign sources in research funding, especially in the case of R&D conducted in the public sector. Research and development in the interests of the Estonian society and economy are modest and the R&D costs of the entrepreneurship sector low. Cooperation between universities and companies is insufficient — Estonia is clearly behind the EU’s innovation leaders in terms of the number of joint publications by companies and research institutions. The share of the private sector in the funding of research and development institutions has increased and amounted to 5.8% in 2018, but this is clearly below the 7% target.

Proficiency in Estonian as a native language remains stable according to the final examination results. Proficiency in Estonian as a second language has improved in the last decade, but has remained at the same level in the last few years. Learning Estonian abroad or creating options for this in Estonia is important for both creating and maintaining motivation to return, but also for making it easier for those returning to cope in Estonian schools. Foreign language skills are improving among upper secondary school graduates; attention should be paid to the foreign language skills of the non-Estonian speaking population.
Performance reports summary

Education

1. **The share of children aged 4–6 in pre-school education** has somewhat increased since 2010 (90.4% in 2010; 92.8% in 2018).¹ There is no central information on those not participating. It can be assumed that some of these children are either in day care or at home with parents or grandparents at their parents’ wishes or have moved abroad with their families without notifying the population register. There are also those who have not found a pre-school place. The share of non-Estonian speaking children who participate in Estonian pre-school education, incl. the number and share of those participating in language immersion, has grown year after year.

2. **The share of young people aged 18–24 with low education who are not in education** is nearly 10% and this has remained on the same level in the recent years; the increase in the share of people without secondary education among younger age groups and gender gaps in post-basic school education (7% of women and 13% of men who have a low level education are not in education) is worrying. The aim of the lifelong learning strategy is to reduce the share of these young people to below 9% by 2020.

3. The school network needs further reforms due to the **regional differences in the changes of the number of students.** The number of basic school students has increased in the last decade in Harju, Tartu and Rapla counties by 43%, 23% and 4% respectively. The number of basic school students has fallen the most in the last decade in Jõgeva, Valga and Hiiu counties. In the 2019/2020 academic year there were a total of 531 operating general education schools² — 361 primary and basic schools, 157 secondary schools and upper secondary schools and 14 adult upper secondary schools. Ten years ago there were 44 more general education schools. There are 16 state upper secondary schools and, similarly to the previous year, students can study in those in 13 counties. As of this year, studies began in a new state upper secondary school in Kohtla-Järve. There is a plan to establish a total of 25 state upper secondary schools by 2023. Several private schools have been established — compared with the 2009/2010 school year, the number of private schools has grown by 24 (from 33 to 57), half of which operate in Tallinn. At the same time, private schools have also been established in the recent years in areas where the number of students has decreased in the last decade.

4. **The distribution of basic school graduates between vocational and general upper secondary education** is still out of balance in favour of the latter. The aim for 2020 is a division of 35/65 but over the past five years, 25—26% of basic school graduates have opted for vocational education and 70—72% for general secondary education³. The results of a survey conducted among students of years 8 and 11 showed that students’ awareness of the opportunities of vocational education is still low and information about its possibilities and advantages does not reach young people. The data still show that considerably more people end up in vocational education within three years of basic school — 37—38%.

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¹ Different methods have been used to calculate this indicator. As the target (95%) has been set according to the Eurostat methodology, it would be reasonable to monitor the change on the basis of the indicator calculated using the Eurostat methodology (the indicator for 2018 was 92.8%). At the same time, Estonian methodology has also been developed, which shows a somewhat higher level of participation in pre-school education.

² Source: www.haridussilm.ee.

³ See the statistics on student choices after basic school at http://www.haridussilm.ee/?leht=alus_yld_3.
The study and career counselling system was fully launched in 2015 and since then the number of students who have received support from the programme has rapidly increased: more than 130,000 children and young people received study counselling and career services via Innove’s Rajaleidja centres between 2014–2019. The work of Rajaleidja centres in advising parents and education workers has also been considerably more intensive and extensive than planned. The activities of 2019 were impacted by the career services reform that came into force at the beginning of the year, which involved career counselling and the career information service being transferred from Rajaleidja centres to the Estonian Unemployment Insurance Fund while Innove continued to offer study counselling services.

The share of people aged 30–34 with higher education is still high in Estonia. In 2019, 46.2% of people aged 30–34 in Estonia had higher education. Even though the total number of university students has decreased by a third in the last decade, the number of students studying on state-paid places has increased by around 20%. This in turn poses great challenges to funding higher education. Of specialties, only ICT has grown considerably in the last decade in terms of the number of both students and graduates. In the 2019/2020 academic year, this speciality had 25% more students than ten years ago. The number of students has decreased in all other fields. Compared with the last year, the number of admitted students in the 2019/2020 year fell the most in business, administration and law (-12%); in the last three years, the share of this field in all admissions has fallen from 23% to 20%. There are also changes happening among students: the total number of students is decreasing, but not on the Master’s level, where the admission numbers for the 2019/2020 academic year were the highest of the decade. This grew by 2.3% compared with the previous year, whereas the annual decline was the greatest in the admission numbers of doctoral students (-16.5%). The proportional change in the distribution of students between levels of higher education (relatively larger number of MA students) also increases the average age of students — in ten years, the average age of students has grown from 25 to 27 years. The ageing of the Estonian student body is influenced by general secondary education graduates increasingly choosing not to continue their studies in Estonian institutions of higher education.

Short-term learning mobility of Estonian higher education students is still low compared with the targeted 10% (3.1% in 2019) but has increased over the last years. In the 2019/2020 academic year, the average share of foreign students was 12.2%, whereas in Master’s studies, foreign students form 20.4% and in doctoral studies a total of 25.5% of all students. Students with an international background are increasingly more attractive on the Estonian labour market: in 2018, around one fourth of graduates of Estonian institutions of higher education continued working in Estonia.

The share of graduates in natural and exact sciences, ICT and technology, production and construction (STEM) in higher education has increased over the last years, but the 2019 indicator (27.9%) is somewhat lower than the year before (28.8%) and the 2020 target (29%). Increase in STEM graduates is an important goal, taking into account the growth of productivity. At the same time, there are great differences within the three fields, which the indicator measures as a whole. The demand is high for ICT specialists and the shares of students and graduates continues to grow fast, so the field of ICT is moving successfully towards the established target. There is a great lack of specialists in several fields of technology, but the number of graduates is decreasing, so achieving the goal requires even more effort. There is a demand for graduates in several fields of natural sciences, but the problem here lies in low wages. Many graduates do not immediately enter the labour market, but continue their academic studies. The share of STEM graduates in higher education has been affected by speciality grants, the IT Academy programme, incl. the companies of the sector supporting the programme, measures to popularise STEM and research and measures supporting the internationalisation, mobility and progeny of higher education. Young people’s selections are surely also affected by labour market perspectives.

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4 Source: grant recipients, Innove.
5 Source: Eurostat.
6 Source: EHIS.
7 Source: EHIS.
8 Source: EHIS.
9. **Increase in Estonian teachers’ salaries has been the quickest among OECD countries** — in the last six years, the average gross monthly salary of general education school teachers has grown by around 70%: while the average gross monthly salary of a municipal school teacher was just over 930 euros in 2013, by 2019 it had increased to 1576 euros and comprised 112% of the average salary in Estonia that year. The salaries of vocational school teachers are a little below the average salary of general education school teachers (1513 euros). In 2019, local governments increased the average gross monthly salary of pre-school teachers to 96% of the minimum salary of general education school teachers, i.e. 1204 euros and this fulfilled the goal that by 2019 the salary of pre-school teachers should be at least 90% of the minimum salary of a school teacher, i.e. 1125 euros per month. Nevertheless, the remuneration of pre-school teachers is below both the salary of municipal school teachers and the Estonian average gross wage, not to mention the average salary of highly educated and full-time workers. The salaries of municipal school teachers are a little lower than those of state school teachers. The salaries of teachers vary by county — in 2019, the average gross monthly salary of teachers in local governments’ general education schools ranged from 1370 euros in Lääne County to 1662 euros in Harju County. Increasing teachers’ pay continues to be a strategic goal of the state. The aim is that by 2020, the average salary of a teacher would be equal to or higher than the average pay of an employee with higher education and 120% of the state average.

10. **Ensuring a stable and professional body of teachers in the whole country is another great challenge aside from wage growth.** The general number of teachers has grown a little over the last five years, but a large number of teachers do not work full time (often not at their own wish, but due to the smallness of the school; in the 2019/2020 school year, 40% of teachers in cities and 46% of teachers in rural municipalities worked part time) and there is a regional lack of subject teachers. The shortage of teachers is likely to grow in the future. This assumption is partially based on the current age structure of teachers — almost half of Estonian teachers are at least 50 years old; the share of teachers who are 30 years old and younger in general education schools is below 11%. There is currently a particular lack of science and mathematics teachers, which is likely to persist in the future and the shortage of teachers is more strongly felt in rural areas, where subject teachers are unable to work full time. At the same time, young people are not very interested in teacher training, even though the competition indicator for teacher training specialities in universities had risen to slightly above average, i.e. 1.1 in 2019, and there are alternative ways to become a teacher (the so-called career change, through which people end up in schools in different stages of their life and from other walks of life). There is a danger that the number of new teachers does not cover the replacement need in the near future.

11. **The share of adults (aged 25–64) without a specialist or vocational education** has slightly decreased year by year — while in 2010 31.7% of people aged 25—64 did not have a specialist or vocational education, this figure had fallen to 27% in 2018 and 2019. Those with basic or lower education are the most vulnerable on the labour market. People without a secondary education are more often unemployed (the unemployment rate among people aged 25—64 without secondary education was 7.8% in 2019 vs the 4.0% average) or do not participate in the labour market (the participation rate among people aged 25—64 without secondary education was 67.7% in 2019 vs the 84.7% average) and are also more likely to have lower wages. In 2019, there were 83,000 people aged 25—64 who did not have a secondary education according to Statistics Estonia. Their share was the highest among people aged 25—29 (16.5%) and the lowest among people aged 50—59 (around 5%).

To reduce the share of people without specialised or vocation education it is important to decrease the number of dropouts in formal education and increase the share of adults in vocational and higher education.
Participation in lifelong learning has increased in 2019 to an all-time high. According to the Estonian labour force survey, 20.1% of residents aged 25—64 participated in adult education last year, which is 0.4% more than in 2018. Participation in lifelong learning has increased above all due to participation in non-formal education, but the participation rate of adults has also increased in vocational and higher education. For instance, in vocational education, the share of adult learners had increased to 41.7% in 2019. Participation rates are increasing most quickly among adults with higher education, but in the last few years, people with lower education (basic education and lower) have been increasingly active in lifelong learning — ten years ago the participation rate of this target group was around 2%, but in 2019 it was 4.5 times higher at 9.1%. This is a very positive development because in both Estonia and other countries, the socio-demographic groups who need formal or non-formal education the most — older people with lower education — are the least likely to participate.

The share of Russian basic school graduates with at least B1 level Estonian skills has slightly increased since 2011 (56% — 2011; 62.5% — 2019), but reaching the target set for 2020 (90%) is unrealistic. To give a better overview of the Estonian language skill development of all young people whose native language is not Estonian, regardless of whether they learn in Estonian or Russian or participate in language immersion, we also observe, in addition to the Estonian language skills of graduates of basic schools where the language of instruction is Russian, the Estonian skills of other basic school graduates whose native language is not Estonian — in 2019, 70.5% achieved at least B1 level. Reaching the target level (90%) by 2020 is also unrealistic in the case of this indicator.

After upper secondary schools transferred to learning in Estonian, the Estonian skills of upper secondary school graduates improved. The share of upper secondary school graduates who received at least 60% at their state examination in Estonian as a second language was 77.4% in 2019 (70.3% in 2012). The share of young people who pass the B2 level examination with a very good result (more than 75 points) and could take the C1 level examination at the end of their upper secondary school studies has also grown — nearly two-thirds of students who have taken an examination in Estonian as a second language have scored this high.

In 2019/2020, Estonian general education schools employed nearly 15,843 teachers, 93% of whom meet the language skill requirements. 97% of the 1963 vocational school teachers and 91% of the 7997 pre-school teachers meet the language skill requirements. The share of teachers with the required Estonian skills this year is the same as that of the previous year in all of these institutions. In the 2019/2020 academic year, there were a total of 1060 teachers working in general education schools, vocational education institutions and pre-schools (1929 in the 2018/2019 academic year) whose Estonian skills did not meet the requirements. Increasing the language skills is not only important for transitioning to Estonian-language learning (e.g. in upper secondary schools), but also because in schools where the teachers’ language skills do not meet the requirements, the language skills of students are also poorer. A large number of Estonians are in favour of early education in Estonian and multicultural classes. Further steps are required to ensure age-appropriate language studies for all children.

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10 Source: SAIS.
11 The labour force survey of Statistics Estonia assesses the situation on the Estonian labour market. The data collected is used to monitor the status of the economy and the labour market and assess the impact of national policies.
12 Source: EHIS.
13 Source: Statistics Estonia, data from the labour force survey.
14 Source: Innove and EHIS.
15 Source: Innove and EHIS.
16 Teachers teaching in Estonian language or teaching Estonian language — at least C1, all other teachers — at least B2.
Youth field

1. The results of youth work have been positive. **Participation of young people in youth work**, i.e. the share of young people who participate in hobby education, activities of youth centres, national youth associations that received annual support for youth associations, camps, work camps, local government youth councils and youth activity groups, has grown. While in 2010, 37% of young people were involved in these activities, in 2019, 59.9% of all young people aged 7–26 participate (2% more than a year ago). This increase in participation is due to more active participants and the improved availability of organised youth work opportunities. The increase in the number of institutions offering ways to participate has also contributed to the growth of the participation rate — for instance, 32 hobby schools were added compared with the previous year. The number of youth centres has grown less — from 222 (2009) to 281 (2019), but compared with hobby schools, youth centres are the ones that have become more accessible to young people in rural areas. Around half of all hobby school students study sports and almost a third music and art. Participation in other fields is lower — for instance, only 3% of all hobby school students study technology or natural sciences. Hobbies related to technology and nature are more represented in hobby groups of schools for general education.

2. The **regional accessibility of youth work**, measured by the number of young people per hobby school (353) and youth centre (982), has significantly improved. The targets for 2020 are 400 and 1000, respectively, and these have already been met. The work done with young people at the risk of exclusion has been commendable — the share of young people not in education, employment or training (NEETs) has decreased. With the support of the ESF, they have been offered varied, highly effective support services.

3. Participation of young people in society has also been monitored via the **number of organised participation opportunities** (youth councils etc.). This indicator was changed due to the administrative reform; as of 2018, the level of participation opportunities for young people is measured as a share of the total number of local governments. By the end of 2019, organised participation opportunities had been created in 71 (i.e. 89.9%) local governments and, with this, the target set for 2019 was met. In the coming years, the level must be maintained and support for both local governments and young people continued so that youth councils and activity groups could be created in those local governments where young people do not yet have an active organised participation opportunity.

4. The expertise of youth workers is improving, but attention must be paid to increasing the value of the profession of a youth worker (90% of youth workers have higher education, but 60% of them have no specialist education or professional qualification in the field of youth work). This is why it is important to continue to systematically offer youth workers self-improvement opportunities.

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17 Source: Calculations of the Ministry of Education and Research on the basis of EHIS and Estonian Youth Work Centre data.
18 Source: Estonian Youth Work Centre.
Research and innovation

1. **Publishing activity**, which reflects the activity of researchers and the high level of research, has increased — (the number of high-level peer-reviewed articles per million residents was 1600 in 2018). This meets the 2020 target (1600 articles). The target set in the Estonian Research, Development and Innovation Strategy (RDI Strategy) is to reach a level where 11% of Estonian peer-reviewed scientific articles are among the 10% most quoted articles in the world. In the last five years, this has been over 7.4% and the target was almost reached in 2018 with 10%.20

2. According to Statistics Estonia the level of research and development investments in Estonia has been in decline since 2012: We have fallen from 2.28% of GDP in 2011 to 1.4% in 2018 (however, the previous year showed an increase: the figure for 2017 was 1.28%), whereas private sector investments have fallen from 1.44% to 0.59%. The Estonian R&D system is highly project-based and characterised by a large share of foreign sources of funding (structural funds and Horizon 2020). The end of 2018 saw the launch of a public debate on research funding. At the end of the year, Estonian parties signed the Estonian Research Agreement, the aim of which is to increase public sector R&D funding to 1% of the GDP within three years. The international assessment of the Estonian Research, Development and Innovation system22 also brought out as one of its main recommendations the necessity to ensure the importance of research, development and innovation in national policy, increase the respective funding to 1% of the GDP and maintain the funding at least at the same level in the future.

3. The share of high- and medium-high-tech sectors in total employment23 has grown from 7% to 8.4% in the last five years (2018), with the 2020 target set at 9%. As of 2011, it has gradually moved closer to the EU28 average (8.7% in 2018). The contribution of science to the economy is indirectly demonstrated by the level of productivity of business entities per employee (% of the EU average), which was 78% in 2018 and slightly lower than the 2020 target (80%).

4. The number of doctoral graduates was 235 in 2018.24 This is fewer than in the last three years and far from the 2020 target of 300 graduates per year. While the admission numbers of Doctoral students remained more or less on the same level in the last four years (thanks to the increase in the number of foreign Doctoral students), the total number of admitted students in the 2019/2020 academic year fell by 16% compared with the previous year. The dropout rate of doctoral studies is also high, exceeding the share of graduates of the total number of doctoral students. In the last five years, the main trend has been an increase in the share of foreign doctoral students. Year after year, increasingly more foreign doctoral students remain connected to Estonia even after they have completed their studies — 65% of doctoral students who defended their doctoral degree in the 2017/2018 academic year participated in the Estonian labour market a year later (40% in the previous year).25 Increasingly more attention should be paid to applying people with doctoral degrees in both the public and private sectors, so they could use their abilities and skills in the best possible way in the interests of social development.

5. Estonia’s position in the European Innovation Scoreboard has improved significantly in 2018, rising from the 17th to 12th place (95% of the EU average). With this change, Estonia has moved from the so-called group of moderate innovators to the group of strong innovators. According to the scoreboard, Estonia’s strengths include the share of people participating in higher education and lifelong learning in the society, the number of international joint publications, expenditure on innovation unrelated to research, innovation of SMEs, cooperation of innovative SMEs with other parties and the number of trademark and industrial design solution registration applications. The positive side of the cooperation of research institutions and enterprises includes the share of public sector R&D expenditure financed by the private sector, which as doubled in the last five years, forming 5.8% of the public sector R&D expenditure.

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20 Source: Eurostat, Thomson Reuters Web of Science.
21 Source: European Innovation Scoreboard.
22 https://www.hm.ee/sites/default/files/pr_estonia_-_final_report_.pdf
23 Source: Eurostat.
24 Source: www.haridussilm.ee.
Estonian language and way of thinking

1. The indicators of **native language skills** have improved in the long term according to both upper secondary school and basic school final examination results in Estonian, even though the last three years have been characterised by a standstill.

   In 2019, the average examination result in Estonian as a native language was 75.3 points in basic school and 63.7 points in the case of upper secondary school state examinations; in 2010, the respective averages were 70.7 and 58.6 points. The share of graduates whose respective examination score is 80 and above and those whose result is below 20 points has also remained more or less the same in the last three years.

2. Over the past years, **learning in Estonian outside of Estonia** has seen a stable number of students learning Estonian in foreign universities (2019/2020 – 950) and the number of children learning Estonian abroad has increased (2019/2020 – 3700; 2010/2011 – 1600). The number of general education and Sunday schools, associations, pre-schools, hobby groups for pre-schoolers and language courses that offer Estonian-language learning abroad has remained the same for the last four years — 80. Studies of Estonian language and culture are supported in 30 higher education institutions, which have the respective readiness.

   The number of Estonians living abroad is approximately 150,000—200,000, i.e. around 15% of all Estonians. According to Statistics Estonia, the number of migrants coming to Estonia, incl. those with Estonian citizenship and/or born in Estonia, has spiked since 2015. A total of 48,000 persons with Estonian citizenship migrated to Estonia as of the expansion of the European Union (2004), of whom more than 31,000 migrated after the migration turn, i.e. between 2015—2018 when immigration exceeded emigration. Both emigrating and immigrating children and young people and their parents require special attention, above all in relation to language learning. The decision to return is most influenced by the existence of family and relatives in Estonia, the preference to live in Estonia, the wish to send children to an Estonian school and the will to improve life in Estonia. For those returning with children, it is important to find a place in a pre-school and school and for children to adjust quickly and smoothly to the Estonian education system. For general education schools, language-related problems are the only thing that prevents children from adjusting. Parents’ problems include finding a (suitable) pre-school and school place, but also the structural and substantial part of admission tests.

3. **The share of non–Estonians who do not speak Estonian has gradually increased.** According to the labour force survey, the share of non–Estonians who speak Estonian and whose home language is not Estonian is 70%. 18.5%, i.e. around 59,000 non–Estonians can only speak their home language. According to a survey conducted by the Ministry of Culture and the Ministry of Social Affairs (2018), the estimated number of people who do not speak Estonian at all is around 11,000—21,000. Estonian skills have mainly improved among non–Estonians under 30. However, success on the Estonian labour market requires very good Estonian skills — while around 40% of Estonians and non–Estonians with good language skills work as a manager or a top specialist, the figure is around 15% in the case of non–Estonians with average language skills and a little over 10% in the case of non–Estonians who do not speak Estonian.

4. Foreign language skills (English, Russian and German) have improved significantly among Estonian adults aged 15—74 in the last decade. In 2019, at least 61.2% of people aged 15—74 spoke at least two languages besides their home language (56% in 2010). Even though learning a first foreign language is obligatory from third grade in Estonian general education schools, a quarter of first and second graders studied at least one foreign language in the 2019/2020 school year. Approximately 40% of second graders study a foreign language.

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26 Source: Ministry of Education and Research.
27 Source: Ministry of Education and Research.
29 Source: EHIS.
5. In Estonian schools (just like elsewhere in Europe), English is the most popular foreign language — this is studied by more than twice as many students than the second most popular language, Russian (in 2019/2020, 95.8% of full-time students studied English as their first foreign language)\textsuperscript{30}. Foreign language skills should not be limited to English. It is important to expand the selection of languages studied, improve the studies, prepare learning materials and train teachers, but also to inform both individuals and the society in general of the benefits of being multilingual. The foreign language skills of the non-Estonian speaking population require attention. According to PIAAC 2012, in the youngest surveyed group (16—24), only 4% of Estonians did not have English language skills, whereas in the case of Russians, the indicator was more than every fourth person (27%). 80% of Estonians and 46% of non-Estonian-speakers speak it fluently or well. At the same time, the extra salary for speaking several foreign languages is higher among non-Estonian speakers than Estonian-speaking individuals.

\textsuperscript{30} Source: EHIS.
State governing (archiving)

1. The most important task of the period in the action plan of the National Archive was collecting digital information and increasing access to archival materials. 2019 saw an improvement in these fields. The storage volume of the digital archive grew by 60% and nearly reached 0.5 petabytes. This growth is mainly due to digitisation, but also the record high volumes of accepted digital materials in 2019. According to web analytics, the number of online visits to the National Archive as well as the use thereof grew — online visits formed a total of 99.5% of the 1.5 million visits.

2. Work has begun under the mass digitisation projects curated by the Ministry of Culture to digitise the documental heritage of 14 heritage institutions. Public procurements are underway for digitising newsreels and photo negatives.

3. In August 2019, the design contract for the reconstruction of the building of the National Library was signed. The design work will be completed in March 2021 and, as the partner of the library, the National Archive will be responsible for planning the relocation of three Tallinn units to the library wing facing Endla Street.

4. March 2019 saw the launch of the electronic co-working environment Astra, which simplifies the work of archive creators and reduces their administrative load and bureaucracy. In the field of collecting, acceptance of paper documents increased significantly in addition to the aforementioned digital materials. The digitisation of archive materials spiked as well: over the year, approximately two million images and 100 films were added, i.e. the volume of materials available online increased by around 10%. Two achievements stand out in the field of research: the publishing of a two volume monograph on Head of State Jaan Tõnisson by K. Aru in cooperation with the Government Office and the opening of the exhibition Dannebrog 800 with support from several Estonian and Danish partners.