

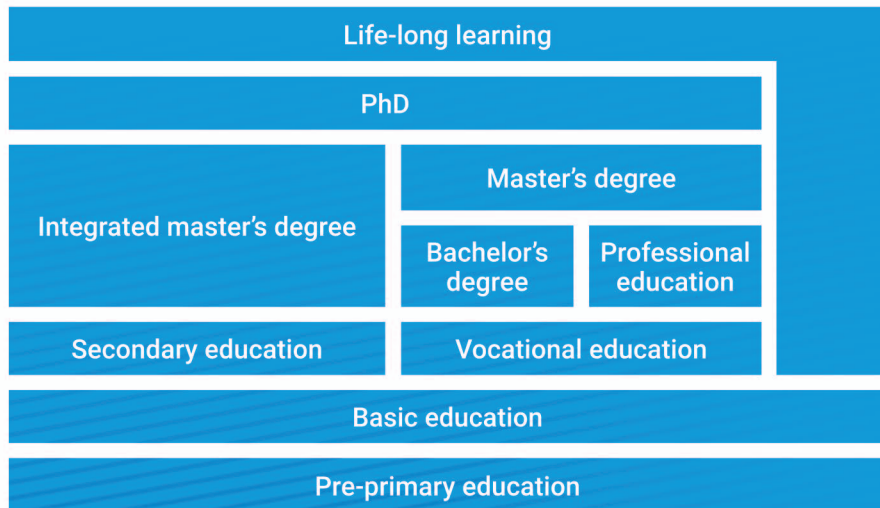


REPUBLIC OF ESTONIA  
MINISTRY OF EDUCATION  
AND RESEARCH

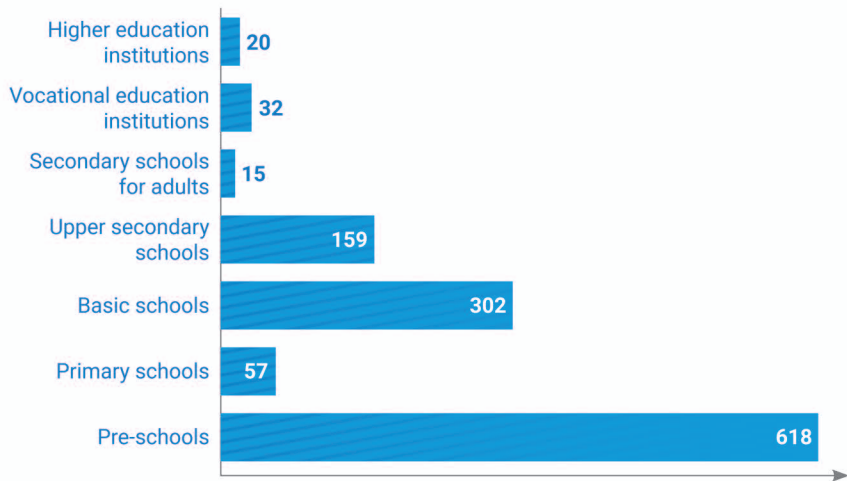


Top photo on the cover: Erik Riikola

# Education System in Estonia



- Estonia has a comprehensive education system that covers pre-school, basic, upper and vocational secondary as well as higher education.
- In the 2018/19 academic year there are 302 basic schools, 159 upper secondary schools, 57 primary schools and 15 upper secondary schools for adults. In total there are approximately 150,800 students studying at these general education institutions.
- In addition, there are 32 vocational education institutions and 20 higher education institutions.
- In the 2018/19 academic year there are 618 pre-schools.
- The length of a single academic year is at least 175 teaching days (35 weeks) starting on September 1.
- In addition to the relatively long summer break, there are four school holidays in Estonia: the autumn holidays, Christmas/New Year's, winter and spring holidays.



## Estonia's Basic Education Is the Best in Europe

According to the results of the OECD PISA 2018 (the Programme for International Student Assessment), the scores achieved by 15-year-olds in Estonia are the **highest in Europe** and rank **among the top scorers worldwide**.

- Estonia has taken part in PISA five times (2006, 2009, 2012, 2015 and 2018). Estonian students have shown stable and high results in all PISA cycles.

- » In science, Estonia ranks **1st in Europe and 4th in the world**.
- » In reading, Estonia ranks **1st in Europe and 5th in the world**.
- » In mathematics, Estonia ranks **1st in Europe and 8th in the world**.

- The results of Estonian students have improved significantly since 2006: the share of top performers has increased while the share of students performing below the baseline level has decreased.



- In Estonia, low- and high-performing students are less often clustered in the same schools than the OECD average, which indicates that schools in Estonia provide equally good education.
- The results also indicate that the level of education provided by basic school is not dependent on the socio-economic background of a student.
- Amongst OECD countries, Estonia has advanced steadily to the top, despite the fact that its expenditure per student remains about 30% lower than the OECD average.
- The majority (77%) of Estonian students exhibit growth mindset – they believe that they are capable of improving their intelligence and are willing to put effort into their own development in order to secure a better future.
- On average, 70% of Estonian students reported being satisfied with their life (67% OECD).
- Vast majority (89%) of Estonian students feel happy and cheerful always or most of the time, whereas 53% are worried and 51% are often sad.

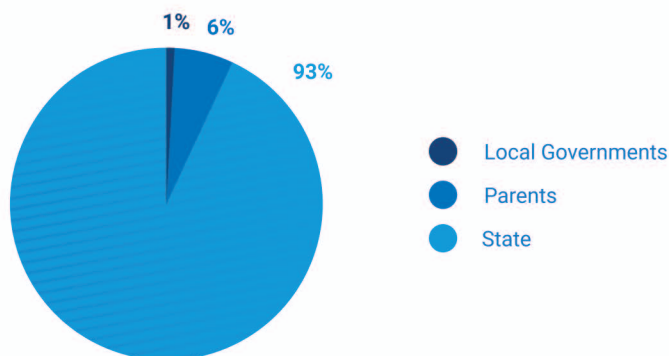




## Pre-school Education

- Pre-school childcare institutions deliver education to children between the ages of 18 months and 7 years in accordance with state curricula.
- The main objective of pre-primary education is to support families by fostering children's growth and development while taking their individuality into consideration.
- Local authorities, at the request of parents, provide facilities for pre-school education.
- The proportion of pre-primary education expenses among general government expenses (from GDP) is ca 1%.
- Local authorities finance 93% of the cost of each pre-school place; 1% comes from the state budget; and the fees paid by parents cover 6%. The fees parents pay per child may not exceed 20% of the minimum wage as established by the Estonian Government.

### Financing of pre-school education



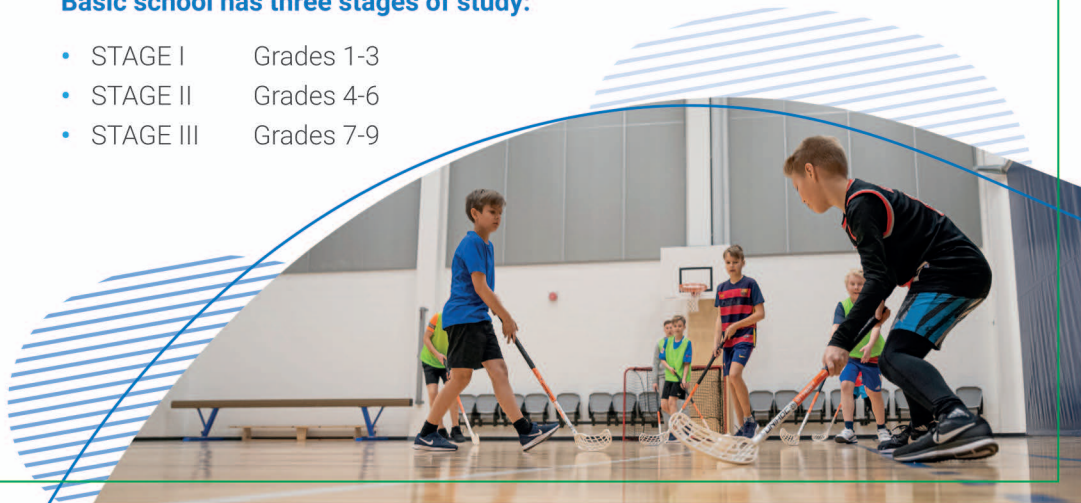
- In the 2018/19 academic year there are 65,935 children in 618 pre-schools, i.e. ca **94% of children from the age of 4 up to school age attend pre-schools**.
- There are 7934 pre-school teachers in Estonia, 68% of whom have higher education.

## Basic Education

- The task of basic schools is two-fold: alongside a high level of knowledge, basic education aims to foster students' interest in studying and enhance their learning skills, cooperation skills, self-regulation and critical thinking, creative self-expression and social and cultural identity. To this end, schools create an age-appropriate, safe and positive learning environment.
- There are mandatory as well as optional courses in upper secondary education. Studies last for three years.
- Children are required to start school if they will turn 7 by 1 October of the year in question and to attend school until they acquire their basic education diploma or turn 17.
- In order to graduate from basic school, students must complete the National Curriculum for Basic Schools and pass three standardised examinations: Estonian language or Estonian as a second language; mathematics; and an exam on a subject of the student's choosing. In addition, they must complete a creative assignment.

### Basic school has three stages of study:

- STAGE I      Grades 1-3
- STAGE II     Grades 4-6
- STAGE III    Grades 7-9





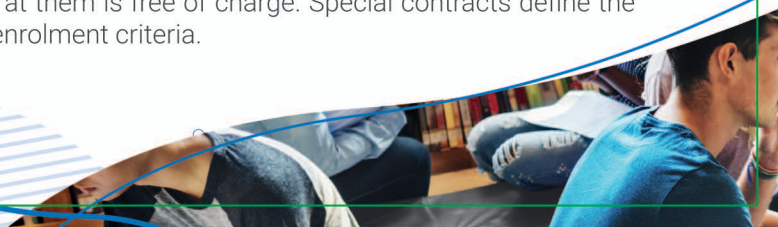


## General Secondary Education

- The task of upper secondary schools is to create conditions in which students can acquire the knowledge, skills and values that will allow them to continue their studies at either a higher education institution or vocational education institution.
- The curricula of upper secondary schools are based on the national curriculum. The study programme is divided into mandatory and optional courses. Studies last for three years.
- In order to graduate, students must complete a curriculum consisting of at least 96 individual courses completed to a satisfactory level.
- At the end of their studies, students must pass **three state exams** (Estonian or Estonian as a second language; mathematics; and a foreign language) and school examinations. In addition, they must complete a **research paper or practical assignment**.
- For the purpose of providing high-quality general secondary education and ensuring a more efficient school network, the Ministry of Education and Research has initiated the establishment of **state upper secondary schools in regional centres**. A total of 24 such schools will have started offering studies by 2023, with at least one in every county.

## International Curricula

- In the 2018/19 academic year, **internationally recognised education is being offered in seven schools in Tallinn and Tartu** – mostly in private schools that charge tuition fees. Tallinn English College and Miina Härma Gymnasium are municipal schools which are funded by their local authorities and studying at them is free of charge. Special contracts define the target group and enrolment criteria.





- The primary target group includes the children of diplomats, foreign researchers, academic staff and specialists.
- International Baccalaureate (IB)

The IB is an internationally recognised educational curriculum developed by the International Baccalaureate Organization (IBO). The language of instruction for IB programmes is English. The IB is offered at:

- » International School of Estonia
- » Tallinn English College
- » Tartu Miina Härma Gymnasium
- » Audentes Private School
- » Tartu International School
- » Tallinn International School.

- European Baccalaureate (EB)

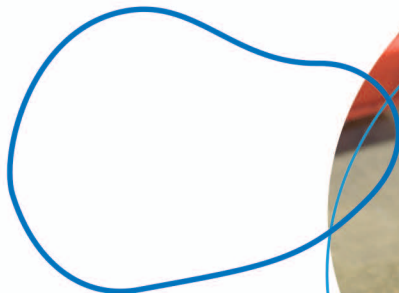
The EB is an internationally recognised European Schools curriculum which includes multilingual and multicultural educational programmes from pre-school to upper secondary education.

- » The only institution offering the EB is Tallinn European School, where there are two language sections – English and French. Children aged 4-18 are admitted to pre-school and primary and secondary school.
- International treaties
  - » Tallinn German Secondary School and Kadrioru German Secondary School offer advanced studies in German
  - » Tallinn Finnish School offers a Finnish curriculum.



# Vocational Education

- Vocational education serves the purpose of fostering knowledge, skills, attitudes, occupational expertise and the social readiness required for working, participating in social life and engaging in the lifelong learning process.
- Vocational education can be obtained:
  - » **after basic school as vocational secondary education** (length of studies: 3-4 years); or
  - » **as vocational skills only without general education** (length of studies: varies from 3 months to 2.5 years).
- In the 2018/19 academic year there are 32 vocational education institutions in Estonia. At least one vocational education institution operates in each county. Based on ownership status, vocational education institutions are divided into state (26), municipal (2) and private (4) institutions. Six institutions of professional higher education also provide vocational training.
- The number of **students in vocational education each year is ca 25,000**, 45% of whom acquire vocational secondary education.
- Students gain **real workplace experience** during their studies. Work practice and practical work performed in the study environment constitute at least half of the volume of a curriculum and are generally given equal attention.



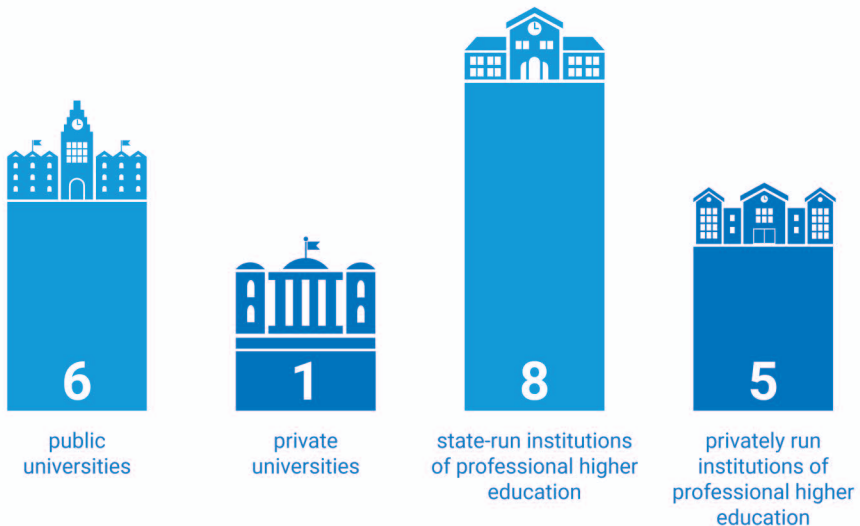
- Vocational education and training (within formal education) is **mostly financed from the state budget**. Base financing covers operational costs; additional financing depends on a school's performance.
- The state supports those who acquire vocational education with **educational allowances** so as to motivate them to acquire their chosen profession during the standard period prescribed in the curriculum, and to study full-time. In addition to educational allowances, it is also possible to obtain **compensation for transport expenses**, and educational institutions can pay **allowances to students experiencing economic difficulties**. A **school lunch allowance** applies to students studying on the basis of basic education.





# Higher Education

- In the 2018/19 academic year, higher education can be obtained in **20 institutions**:



- Higher education is **free of charge** in Estonia for those studying full-time in Estonian.
- In the 2018/19 academic year, **45,815 students** were enrolled in higher education study programmes, nearly 80% of whom are in the state funded study place.
- In the 2018/19 academic year there are **over 5000 foreign students from 125 countries** studying in Estonia. As many as 90% of international students say that Estonia is a good country in which to study (International Student Barometer 2018). Additional information: [www.studyinestonia.ee](http://www.studyinestonia.ee).
- There are more than **150 study programmes with English as the language of instruction**, and that number is growing.
- A needs-based student support system:
  - » Students studying full-time can apply for a **study allowance** (75-220 euros per month) if the financial situation of their family is poor.



- » Students studying full-time in priority areas for Estonia (STEM etc.) or within the framework of measures that support doctoral studies can apply for a **specialisation grant** of 1600 euros per year. The amount of the grant is higher for computing and information technology programmes (1600-3000 euros per year).
- Doctoral students who meet the requirements of obtaining the **doctoral allowance** are eligible to receive 660 euros per month.
- Higher education is **primarily financed by the state by allocating operational funding** and targeted funding to higher education institutions. Operational funding consists of baseline funding (at least 80% of funds) and performance funding.
  - » The central idea of the financing reform in 2013 was to make the funding of universities dependent on the quality and effectiveness of the education, taking into account of the needs of the society.

## Digital Transformation on Education

The educational digital transformation in Estonia aims to implement modern digital technology more efficiently and effectively in learning and teaching, and to improve the digital skills of the entire nation. Digital skills, literacy and knowledge help Estonian people tackle the challenges of 21st century.



- The success of the digital transformation of Estonian education system relies on **thorough professional development and training of teachers and educational technologists, modern digital infrastructure, high speed internet, cooperation and collaboration between schools as well using personal digital devices.**
- The Ministry cooperates with private enterprises and invests in educational startups to create an innovative and internationally competitive education system.
- **85% of general education schools in Estonia use e-School solutions** (i.e. eKool, Stuudium), covering about 95% of all grade school students. These innovative tools provide an easy way for parents, teachers and children to collaborate and organize all the information necessary for teaching and learning.
- Since 2018, **digital textbooks** are available in exciting form **for all basic schools free of charge**, resulting in more interactive and personalised learning and lighter school bags. They combine a textbook, a workbook and an exercise book to create an environment where students can acquire new knowledge, solve tasks and take notes.
- By 2020, schools will be able to provide general education using only digital learning materials.
- Estonia's success in the digital transformation can be seen in the educational landscape since twice as many students pursue careers in ICT in Estonia than the average in other OECD countries. **Every 10th student sets out to study ICT every year.**

Further information on the digital revolution on education in Estonia can be found on e-Estonia webpage: [www.e-estonia.com/solutions/education](http://www.e-estonia.com/solutions/education)



# Systematic and Strategic Entrepreneurship Education

- Estonia has had **entrepreneurship education (EE) since 1994**, when Junior Achievement Estonia was established. Since 2016, the ministry initiates and implements a new strategy to implement EE systematically at all educational levels.
- In 2018/19 nearly 40% of schools teach entrepreneurship and 95 schools have students companies. **Most universities** and **all vocational schools** teach entrepreneurship to all students at all curriculars.
- Hands on EE and student companies make school life more exciting and lively, giving impetus to changed learning concepts, experience-based learning, subject integration, and collaborative learning. In many schools, all teachers are contributing to and supporting EE.
- The main drivers for EE implementation are:
  - » collaboration among different stakeholders (ministries, business organisations and schools from all education levels);
  - » Financing and strategic management from the ministry;
  - » Flexibility and managerial autonomy of the schoolmasters (the greatest in the examined OECD countries)
  - » Implementation of EE systematically at all education levels
  - » methodological tools and instructions made available for teachers
- The European Commission has consistently complimented Estonia on its **systematic approach to developing and implementing** the EE strategy that has reached a wide range of schools across Estonia.

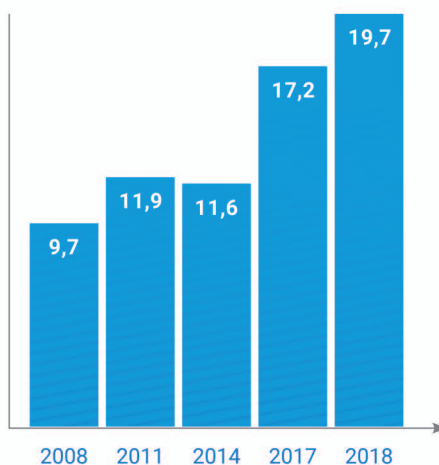




## Adult Education


- The objective of adult education is to provide all adults with study opportunities that are of good quality, flexible and diverse, and that also take the needs of the labour market into account.
- The participation of adults (25-64 years) in lifelong learning has grown rapidly in recent years, reaching **from 11,9% in 2011 to 19.7% in 2018**. The 2020 target is 20%. While aiming for this, it is important to reduce the proportion of people with only general or a lower level of education and those without professional or vocational education.

### Participation in life-long learning



- Adult education in Estonia is divided into formal education and continuing education.
- Adults usually acquire basic and general secondary education at **adult upper secondary schools**, although acquiring general secondary education is also possible at **vocational schools**.
- Adult upper secondary schools are flexible in preparing individual curricula and adapting the study process to the needs of students (for example, allowing them to study single subjects in order to increase accessibility). Other flexible study opportunities which have been created for adult learners are distance learning, evening courses, external studies, part-time studies and participation in various courses.
- In regard to **non-formal education**, institutions of vocational education and higher education as well as private educational and training institutions





are **increasingly providing continuing education courses and retraining courses**. These allow adults to acquire and improve their professional knowledge and skills, develop their creativity, talents and social skills and retrain themselves.

- Additionally, there have been **numerous campaigns to introduce adult learning opportunities**. The most popular has been Adult Learners' Week, which has taken place every autumn since 1998. Its objectives are to value adult education, learners and educators and to showcase adult learning opportunities.
- The OECD Survey of Adult Skills (PIAAC) has contributed to the field of adult education by identifying necessary skills and socio-demographic groups who encounter obstacles in taking part in training.
  - » **PIAAC has shown that Estonian adults are above the OECD average in literacy and numeracy** but have unexpectedly low skills in problem-solving in a technology-rich environment. Since the publishing of the PIAAC results, more attention has been paid to ICT training for older adults.



## Research

- The Estonian Academy of Sciences, an independent and high-level association of researchers, advises the ministry on developing and implementing RDI policy.
- **Investments in R&D reached 304 million euros (1.29% of GDP) in 2017.** Nearly half of this amount (122 million) was financed by the government sector. Estonian R&D funding has been highly competitive. To increase the stability of the system, the general grant for peer-reviewed R&D institutions was increased nearly four times compared to 2014 and is now at almost the same level as competitive research grants.
- Estonia is participating in the EU framework programmes for R&I with above-average success rates and a high ranking among EU Member States. **The investment return per researcher in Estonia has been ca 150% higher than the EU 28 on average.**
- There are **20 peer-reviewed R&D institutions** in the country, six of which are public universities. In 2017 there were 4251 full-time researchers, representing 6.45 full-time researchers per thousand employees.



- Of the publications published in 2015 by Estonian authors, 10.3% were among the top **10% of the world's most cited publications**. This result guarantees Estonia a place in the global top 20.
- Whereas in science publication Estonia is making waves in the environmental and natural sciences, the focus of the country's RDI strategy is on boosting growth in three sectors: ICT horizontally through all sectors; health technologies and services; and effective use of resources.



### ICT

start-ups  
cybersecurity  
robotics  
smart textiles



### HEALTH TECH

personal medicine  
digital prescriptions  
genetics research  
e-Health



### ICT

material science and industry  
innovative construction  
healthy and functional food  
chemical science

- As a new initiative, scientific advisers are consulting on R&D-related issues in the specific policy fields of each ministry. In addition, strategic research of national importance is being supported via the RITA programme.
- ADAPTER is a network of R&D organisations working as a one-stop-shop that enables companies to submit enquiries to Estonian R&D institutions, search the database of all services offered by these facilities, discover what kind of support mechanisms there are to help companies engage in R&D cooperation and more.
- NUTIKAS is an activity launched to support applied research in smart specialisation growth areas. The funding helps companies in commissioning universities and research institutes to carry out applied research or product development projects by funding a study or product development project.



## Language

- According to Statistics Estonia, 69% of the population of Estonia were Estonians, 25% were Russians and 6% represented other nationalities in 2017. Knowledge of Estonian among non-Estonians has improved constantly, but there are still more than 30% of non-Estonians who claim not to be able to speak the national language.
- Children whose mother tongue is not Estonian can obtain basic education in Russian, Estonian, English or Finnish or as part of the Estonian-Russian language immersion programme. **Participation in immersion programmes has doubled in both early childhood and basic education in the last 10 years.**
- **In all upper secondary schools at least 60% of studies are conducted in Estonian.** Estonian language and culture are taught at more than 30 institutions of higher education in Europe, America and Asia.
- In addition to academic studies, Estonian language and culture are also taught at foreign general education schools, European Schools, supple-

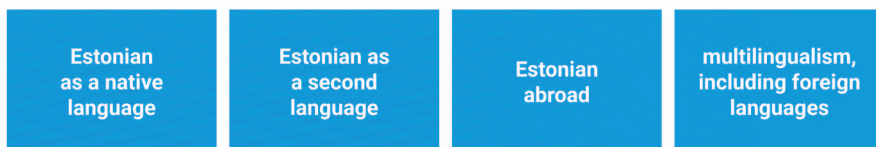




mentary schools, Sunday schools and nursery schools, in associations and toddler groups and on language courses. Around 1000 foreign students study Estonian in other countries, while around 3700 children study the language at Estonian schools and nursery schools and in toddler groups and associations abroad.

- More than 90% of students in lower secondary education study at least two foreign languages, while students in upper secondary schools also learn a third or fourth foreign language. As of 2014, Estonian school-leavers can take internationally recognised language proficiency exams in Russian, German and French as a substitute for the Year 12 foreign language state examination.
- Estonian language with its nine vowels (a, e, i, o, u, õ, ä, ö, ü) and 14 grammatical cases is considered of the most difficult languages to learn for foreigners.
- The total number of people who speak Estonian is ca 1.3 million. Approximately 1.1 million speak it as their native language, 900,000 of whom live in Estonia.

#### **Strategic planning for the development of the Estonian language covers four areas:**

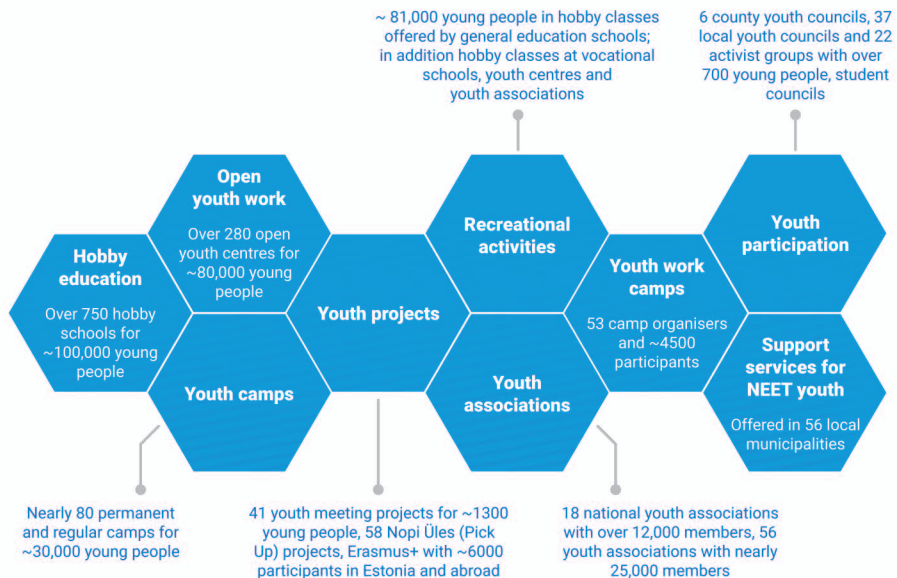


#### **Estonia's foreign language policy aims to:**

- ↔ ↗ expand the range of options for studying foreign languages through learning techniques, venues and choice of languages taught;
- ↑ improve the quality of language studies in formal and informal education;
- ✓ ensure the quality of foreign language teacher training; and
- diversify opportunities for the assessment of language skills.

# Youth

- Estonian law defines a young person as being between 7 and 26 years of age. On this basis there are 276,800 young people in the country, representing **21% of the population** (as at 1 January 2018).
- In 2018, **57% of young people in Estonia were involved in youth work activities, 90% of whom were satisfied with them.**
- In total there are more than **7000 specialists** working in the field of youth work. Three higher education institutions offer youth work degree studies. In 2017, 53% of young people in Estonia were involved in youth work activities, 87% of whom were satisfied with them.
- Youth work is organised by
  - » youth centres,
  - » hobby schools,
  - » youth councils and various youth associations,
  - » youth camps and work camps,
  - » youth programmes and projects
  - » and as part of extracurricular activities in schools.



- Local authorities are closest to young people and, as such, are in charge of planning the objectives, activities and funds required at the local level. The Estonian Youth Work Centre, managed by the ministry, is a state agency which implements the Estonian Youth Field Development Plan nationwide.
- The strategic goal in the field is for every young person to have plentiful opportunities for self-development and self-realisation, which supports the formation of a cohesive and creative society. The measures and activities aim to:
  - » increase opportunities for young people to develop their creativity, show initiative and work together;
  - » increase the inclusion of young people and improve their employability;
  - » support the active participation of young people in community life and decision-making; and
  - » ensure the development of high-quality youth policy and youth work.
- The unemployment rate of young people aged 15 to 24 has decreased more than twice in the last six years (from 33% to 12%), but is however, still twice as high as for adults. The share of inactive young people who do not study, work or participate in training (NEETs) is almost 9% of the age group.

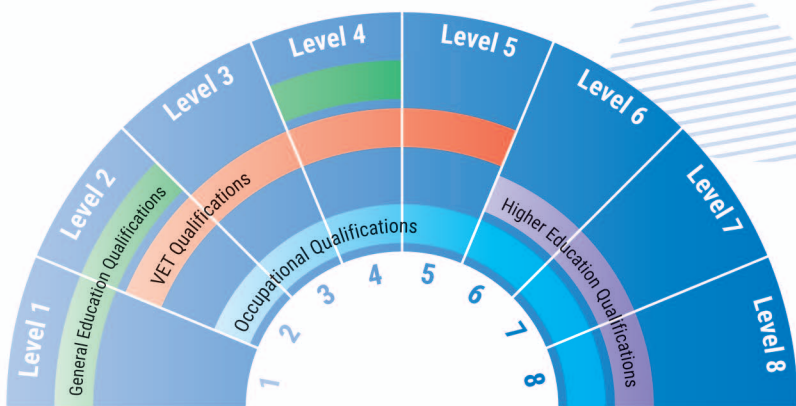




# Professional Qualifications System

- The development of the professional qualifications system is driven by the Ministry of Education and Research and administered by the Estonian Qualifications Authority.
- The Qualifications Authority coordinates the implementation of the eight-level national qualifications framework and National Europass Centre.
- The professional qualifications system is an interface between the labour market and the lifelong learning system which enhances the development, assessment and recognition of a person's professional competence.
- Stakeholders of the labour market are involved in all parts of the professional qualifications system: employers, employees, the state and trainers. Agreements which take occupational standards into consideration and award professions are based on cooperation between various stakeholders.

## Estonian qualifications Framework



- Occupational standards, professional qualifications and professional awards are tightly integrated into Estonia's higher and vocational education system through regularly updated curricula. The learning outcomes of VET curricula correspond to the competences in occupational standards. Furthermore, the learning outcomes of adult education curricula are linked to competences in occupational standards where appropriate.
- In July 2018 there were 553 occupational standards and 127 bodies awarding professional qualifications. In total, the skills and competences of more than 12% of the working-age population of Estonia have been assessed and recognised by employers.



# OSKA Labour Market Monitoring and Future Skills Anticipation System

















OSKA is a powerful analytical tool for enhancing the employability of graduates and, in the longer term, for contributing to productivity and economic growth. This coordination system has been developed gradually since 2014, with 16 economic sectors having been analysed and recommendations for training requirements having been prepared by 2018. All 24 economic sectors will be covered by the end of 2021. Sectoral reports are prepared by the expert panels assembled for each field (comprising leading experts among job creators, schools and public authorities) with the support of analysts and a coordinator from the Estonian Qualifications Authority.

The implementation of OSKA is overseen by the OSKA Coordination Council. Each year, the council submits to the Government via the Ministry of Education and Research an overview of the state of play in regard to the labour market and skills along with its proposals.





## 2016-2018

 Accounting	 Production of chemicals, rubber, plastic and construction materials
 Forestry and timber industry	 The agriculture and food industry
 Information and communication technology	 Transportation, logistics, repair of motor vehicles
 Manufacturing of metal products, machinery and equipment	 Accommodation, catering and tourism
 Social work	 Apparel, textile and leather industry
 Construction	 Education and research
 Energy and mining	 HR, administrative work and business consultation
 Health care	 Trade, rental and repairs

## 2019-2020

 Creative activities, cultural heritage, entertainment	 Water supply, environment
 Media, publishing, advertising, design	 Banking, insurance
 Real estate	 Personal services
 Security, law	 Public administration

# The Ministry of Education and Research

The main task of THE MINISTRY OF EDUCATION AND RESEARCH is to ensure the efficient and appropriate development of high-quality education, research, youth and language policies and the high level and competitiveness of research and development activities.

Our mission is to create opportunities for personal and professional development for everyone through lifelong learning. Furthermore, we encourage



people to take responsibility for their learning and to be creative, enterprising and open to innovation.

## Major educational goals for 2020

Estonia has set five major educational goals for 2020, which the government approved in 2014 as part of the country's lifelong learning strategy. All of the activities are guided by priorities and are taken into consideration when planning both the state budget and European funding.

- **A new approach to learning.** The goal is to implement an approach to learning that considers each learner's individual and social level of development, learning skills, creativity and entrepreneurship at all levels and in all types of education.
- **Competent and motivated teachers and school leadership.** The objective is to make the evaluation and compensation of teachers and school leaders proportional to their professional qualifications and how effective they are in the performance of their work.
- **The accordance of lifelong learning opportunities with the needs of the labour market.** The objective is to create study opportunities and career services that are of good quality, flexible and diverse and that take the



needs of the labour market into account in order to increase the number of people with professional education in different age groups and regions.

- **A digital focus on lifelong learning.** The objective is to utilise modern digital technology in learning and teaching in a more efficient way and with better results so as to improve the digital skills of the general population and to guarantee access to the new generation of digital infrastructure.
- **Equal opportunities and increased participation in lifelong learning.** The objective is to create equal opportunities for lifelong learning for everyone.

In 2018 the ministry launched preparations for the 'Estonia 2035' strategy, which will be compiled by 2020 in consultation with a wide range of social partners, politicians, officials and experts who wish to have their say on the establishment of Estonia's development aims for the next 15 years.

## Registries and databases

- **Estonian Educational Information System – EHIS** [www.ehis.ee](http://www.ehis.ee)

The national register of data concerning the education system. The data of educational institutions, students, teachers/lecturers, graduation documents and curricula are entered in the register. EHIS also has a public view in which anyone can search for information: [www.haridussilm.ee](http://www.haridussilm.ee).





- **State register of professional qualifications** [www.kutsekoda.ee](http://www.kutsekoda.ee)

This register contains information on sector skills councils, competence-based professional standards, professional qualifications and their levels, professional certificates, the procedures for awarding professional qualifications and the awarding bodies.

- **Estonian Research Portal – ETIS** [www.etis.ee](http://www.etis.ee)

ETIS collects information on Estonian R&D and provides an environment for the operative exchange of information. The portal presents an overview of the aspects of Estonian R&D. It is also a channel for the latest research news in which upcoming events are promoted.

- **The visual educational statistics database HaridusSilm**  
[www.haridussilm.ee](http://www.haridussilm.ee)

## Estonia in brief

**Population:** 1.3 million

**National language:** Estonian  
Estonian belongs to the Finno-Ugric language family along with Finnish and Hungarian.

**Main ethnic groups:** Estonians 69%,  
Russians 25%

**Area:** 45,339 km<sup>2</sup>  
Estonia has around 1500 islands  
and 3794 km of coastline.

**Capital:** Tallinn

**Largest cities:** Tallinn, Tartu, Narva,  
Pärnu, Kohtla-Järve

**Administrative divisions:**  
15 counties

**System of government:**  
Parliamentary democracy  
Estonia is a member of the UN and OSCE (1991), the EU and NATO (2004), the Schengen zone (2007), the OECD (2010) and the eurozone (2011).





