

Estonia. Smart solutions for education innovation

education
estonia



Estonia

- + population: 1.3 million
- + 45,339 km²
- + EU, NATO member (since 2004)
- + 99% of public services online



Estonian students rank #1 in Europe (PISA 2018)

4th

in the world in
science

5th

in the world in
reading

8th

in the world in
math



≈ 1.5 times more
top performers
vs OECD average



≈ 2 times less
low performers
vs OECD average

Education has been highly valued through generations

Before 1918

Under Danish, Swedish, German, Russian rule

13th c. First monastic schools

17th c. Schools for peasant children

1860-70s Compulsory school

1881 Literacy rate 94%

1918-1940
Estonian Republic

Start of the Estonian national education system. From 1920 compulsory and free education for 6 grades.

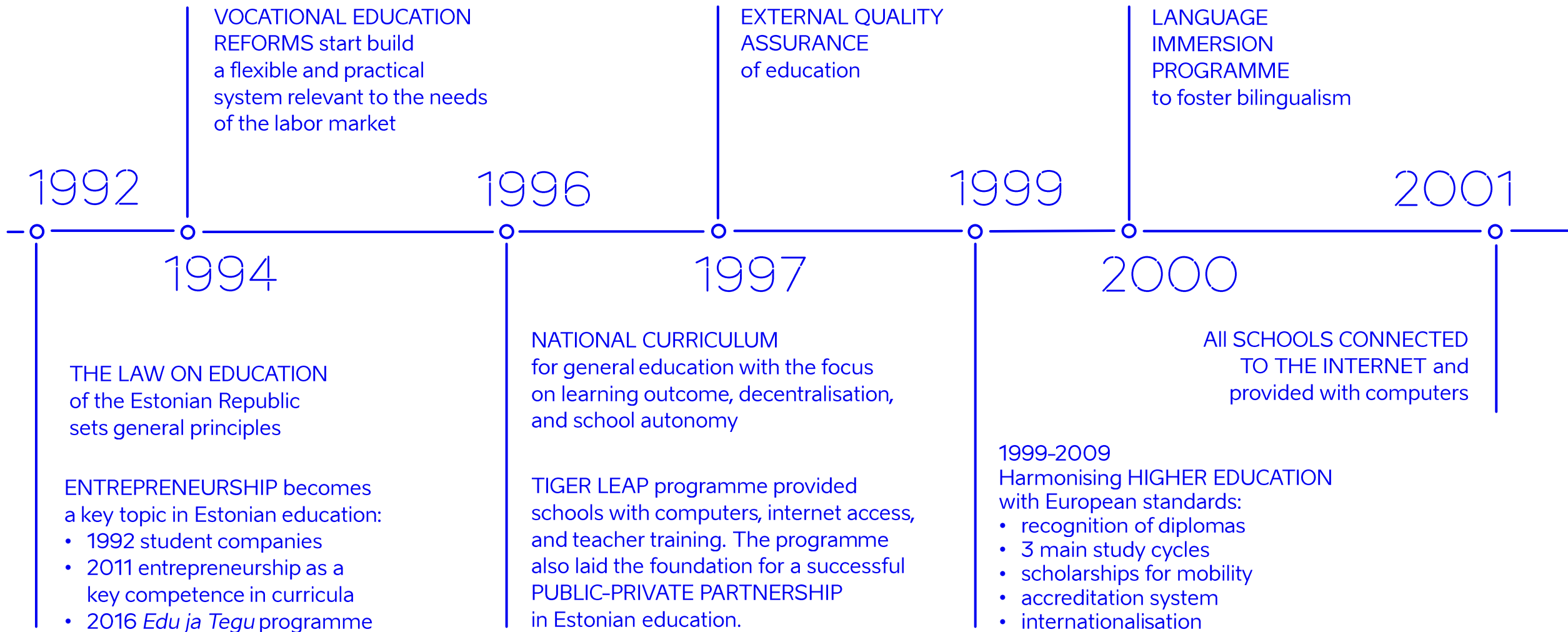
1944-1991
Soviet Occupation

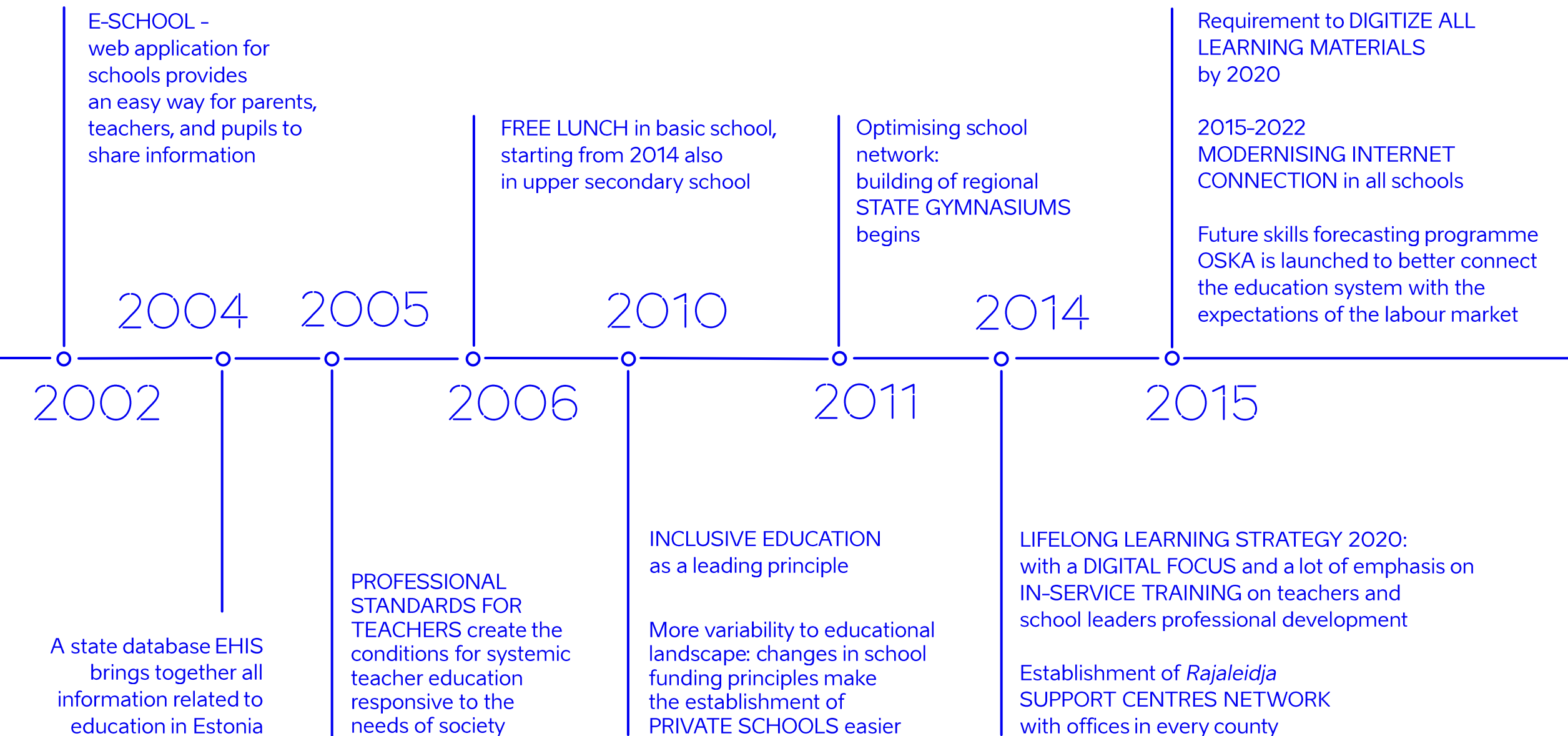
Estonia managed to maintain high-quality teaching and learning in Estonian.

1991
Republic of Estonia

The modernisation of Estonian education begins.

Restart of the education system





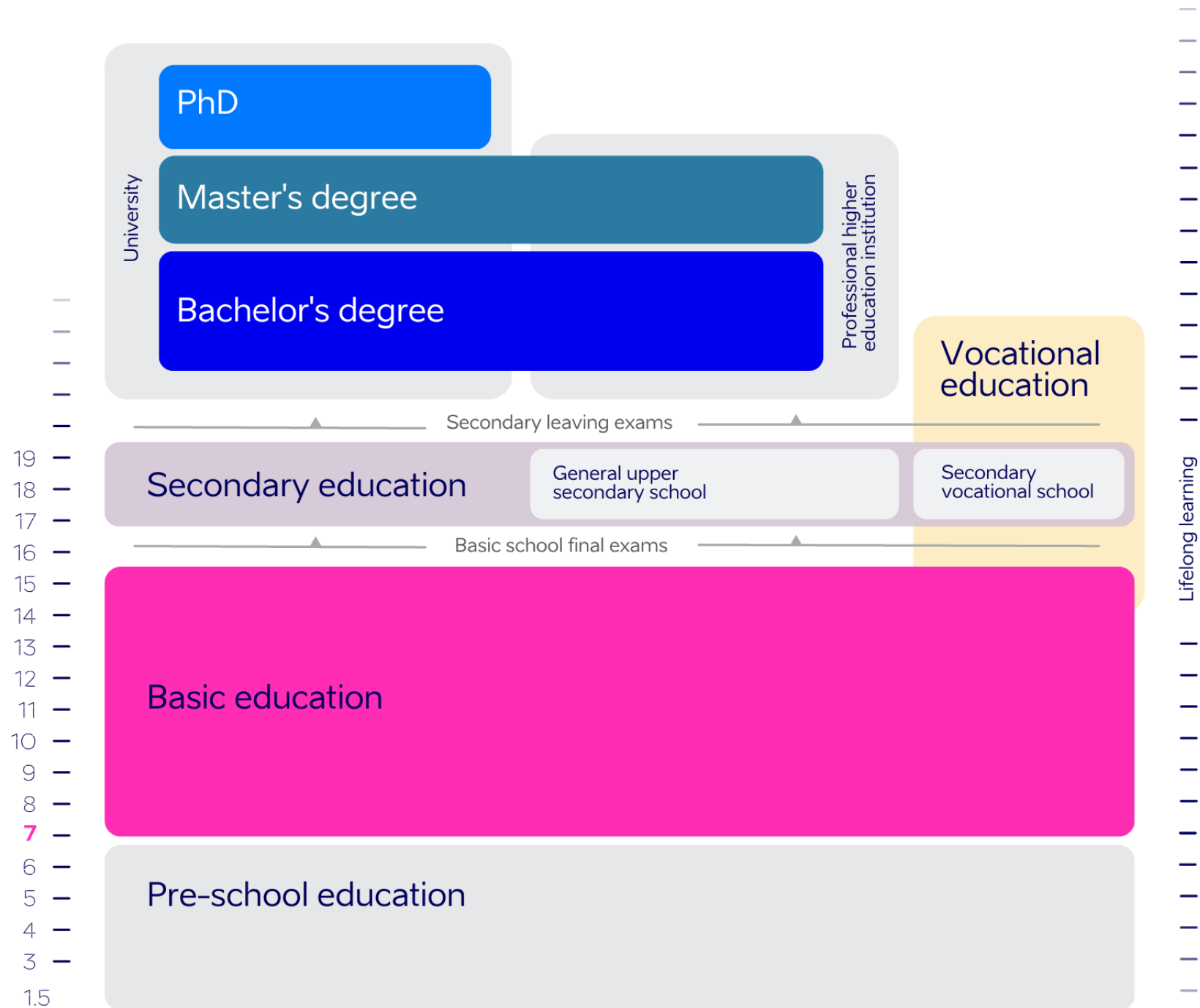
A photograph of two young children sitting at a table. The child on the right, with blonde hair and wearing a blue sweater, is holding a glass of milk and looking directly at the camera. The child on the left, wearing a red and white striped shirt, is looking down at their food. The background is blurred, showing other people and a bright, indoor setting.

Everyone has the right for a high quality education

- + In Estonia, student's socio-economic background has a low impact on performance (6.2 % of variation compared to 12% in OECD)

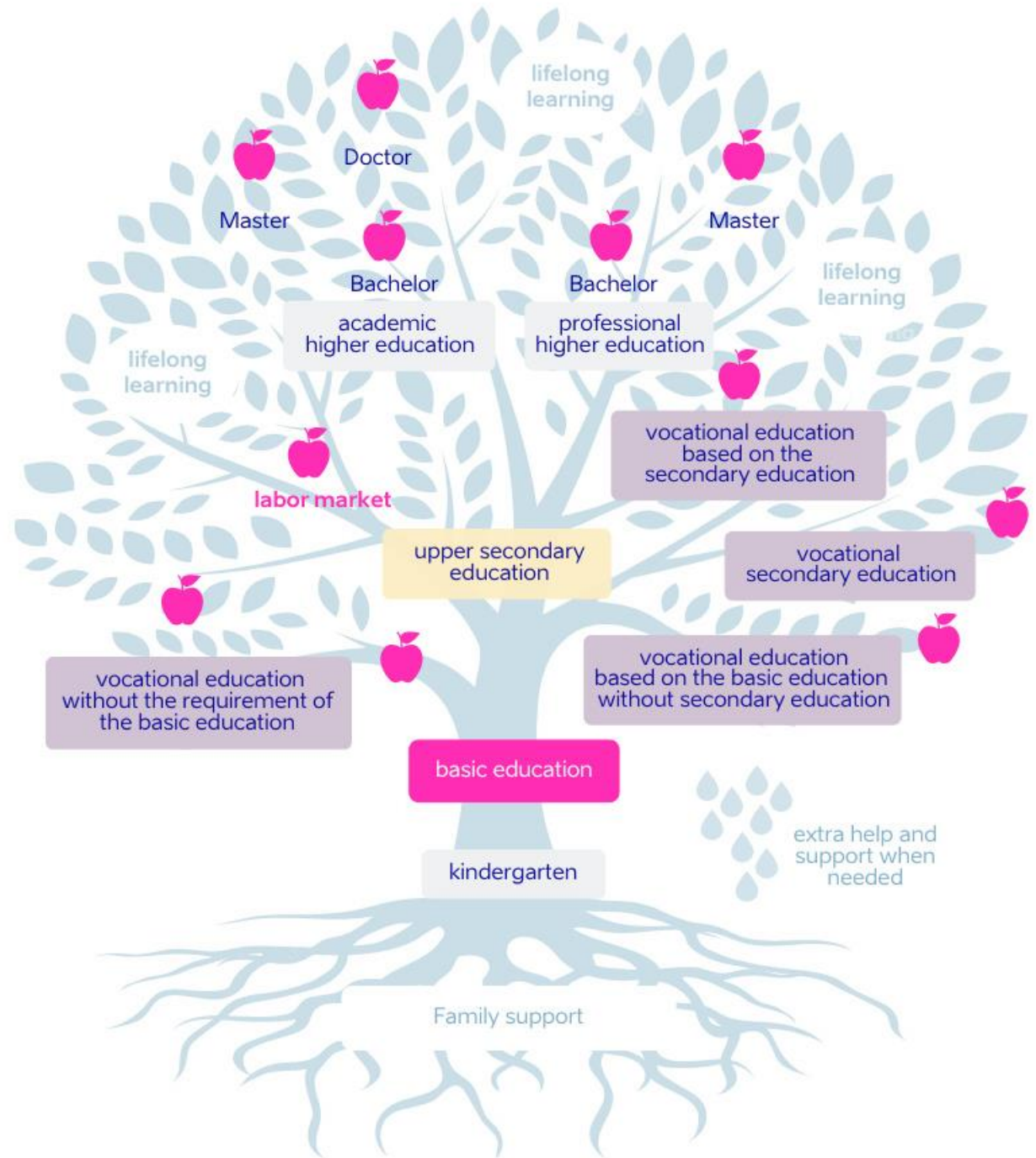
Estonian education today

General education:
+ 156,786 students
+ 16,569 teachers
+ 517 schools



The strength of the tree depends on its roots

No matter which path you have started on, you have the possibility to move on from one branch to another.



Preschool: preparing for school

- + 94% of 4-6-year children attend kindergarten, though this is not compulsory in Estonia
- + Curriculum-based learning outcomes are achieved by learning-through-play method

Characteristics of Estonian education

- + Estonia has successfully implemented an INCLUSIVE EDUCATION SYSTEM. Students with different abilities study together.
- + EDUCATION IS FREE-OF-CHARGE from basic to the higher education. School meals, textbooks, and transit are free for all students.
- + TEACHERS ARE HIGHLY EDUCATED. A teaching qualification requires the completion of a Master's degree.
- + Schools, principals and teachers have A LOT OF AUTONOMY.
- + EXTERNAL EVALUATION of learning outcomes gives valuable feedback.
- + All students are entitled for free SPECIAL SUPPORT by psychologists, speech therapists at school or at the counselling centres found in every county.
- + HOBBY EDUCATION offers wide opportunities for self-development in music, sports, art, technology, etc.
- + STUDY AND HOLIDAYS ARE IN BALANCE: School day and school year are shorter than in many other countries.

Technology opens up new possibilities

- + The Tiger Leap programme in the 1990s provided schools with INTERNET CONNECTIONS, COMPUTERS, and IT TRAININGS.
- + For the evidence-based decisions, the EDUCATIONAL DATA is publicly accessible on the internet.
- + DIGITAL LEARNING MATERIALS are available for all subjects and across all educational levels.
- + All schools in Estonia use E-SOLUTIONS.
- + Many schools and kindergartens have EDUCATIONAL TECHNOLOGISTS - technology integration specialists to support teachers.
- + DIGITAL COMPETENCE is set in curriculum as a general competence.
- + Educational programmes create INTEREST IN TECHNOLOGY from kindergarten to university.

Preparing for the information society

95%

of schools
use e-diaries

1st

in digital learning
(CEPS 2019)

99%

of Estonian kindergartens
take part in technology
education programme
ProgeTiger

9%

of students study ICT
in Estonia — twice as
many as EU average
(Eurostat)

40%

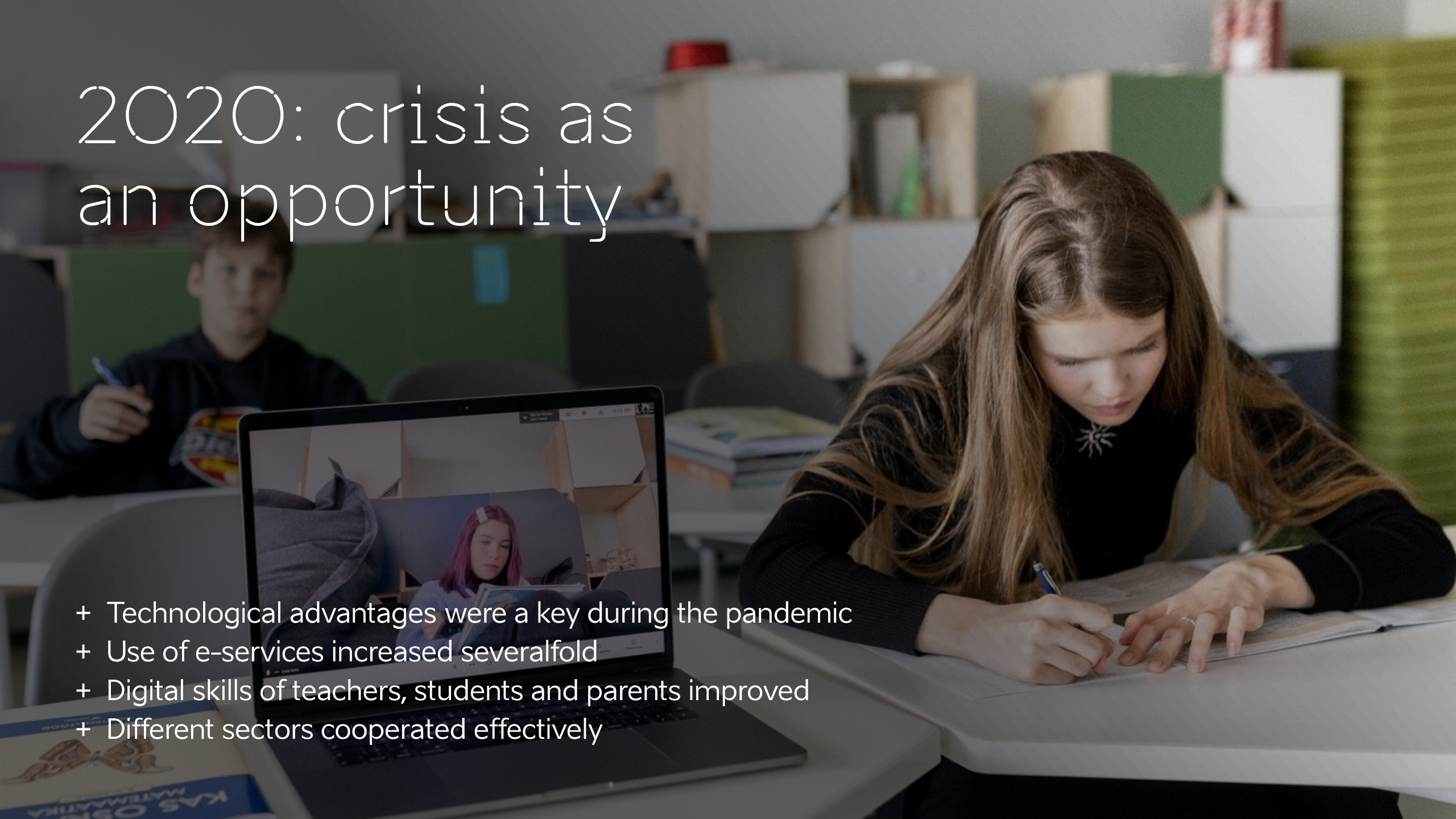
of ICT university students
are female — this is
highest share in Europe
(Informatics Europe)

Digital solutions are in everyday use

- + E-diaries for schools and kindergartens: Eliis, eKool, Stuudium
- + Digital learning materials and platforms: e-Schoolbag, OPIQ
- + Student admission systems: DreamApply, SAIS
- + Examination Infosystem EIS for digital tests
- + Estonian Education Infosystem EHIS
- + HarID user administration system

2020: crisis as an opportunity

- + Technological advantages were a key during the pandemic
- + Use of e-services increased severalfold
- + Digital skills of teachers, students and parents improved
- + Different sectors cooperated effectively



Youth work and
hobby education
offer more
possibilities



+ Almost half (48%) of the 7-18 year olds
participate in hobby education

Vocational education: ensuring essential skills



- + VOCATIONAL EDUCATION is free-of-charge for everybody and has flexible forms of studies.

- + The state has special project (OSKA) to ANALYSE THE LABOUR MARKET to find out what skills are needed in the future.

- + Close COOPERATION WITH THE PRIVATE SECTOR provides students real workplace experience during their studies.

- + Moving from vocational education to higher education and vice versa is becoming increasingly popular.

Internationally acknowledged higher education

- + Estonian universities rank high in prestigious ranking systems such as THE and QS
- + Innovative study programmes: e-governance, cybersecurity etc
- + Student projects from self-driving car to space satellite
- + Over 150 degree programmes fully taught in English, in 11 internationally accredited universities



Lifelong learning has become a lifestyle in Estonia

- + Estonians within the 25-64 age group actively participate in learning at almost double the rate of the EU average (17.1% vs 9.2% in 2020).



We truly think
that the best thing we can
give to our children is not
land, house or a bank account,
but good education.

T. H. Ilves

Aitäh!

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estonia



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Photos: Rénée Altnov, Aron Urb, Sven Zacek,
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