

# Estonia. Smart solutions for education innovation

education  
estonia



# Estonia

- + population: 1.3 million
- + 45,339 km<sup>2</sup>
- + 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

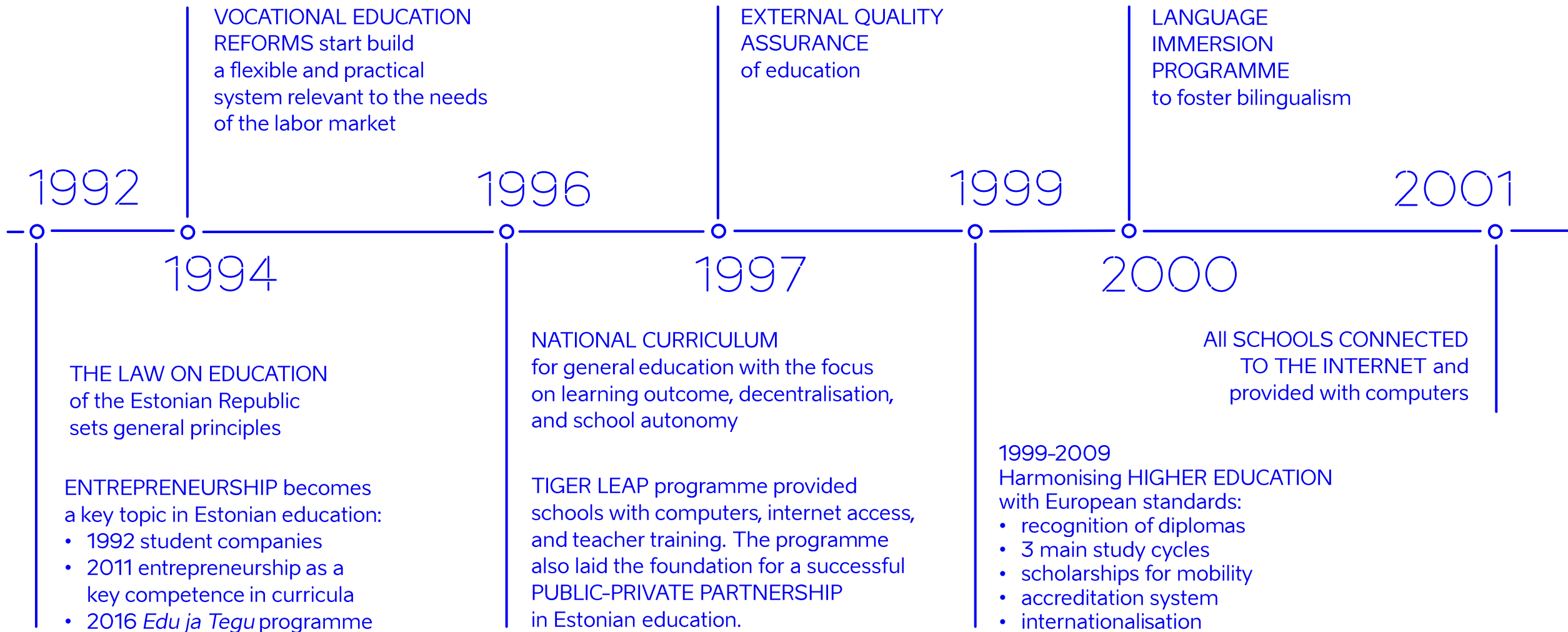
Estonia managed to maintain high-quality teaching and learning in Estonian.

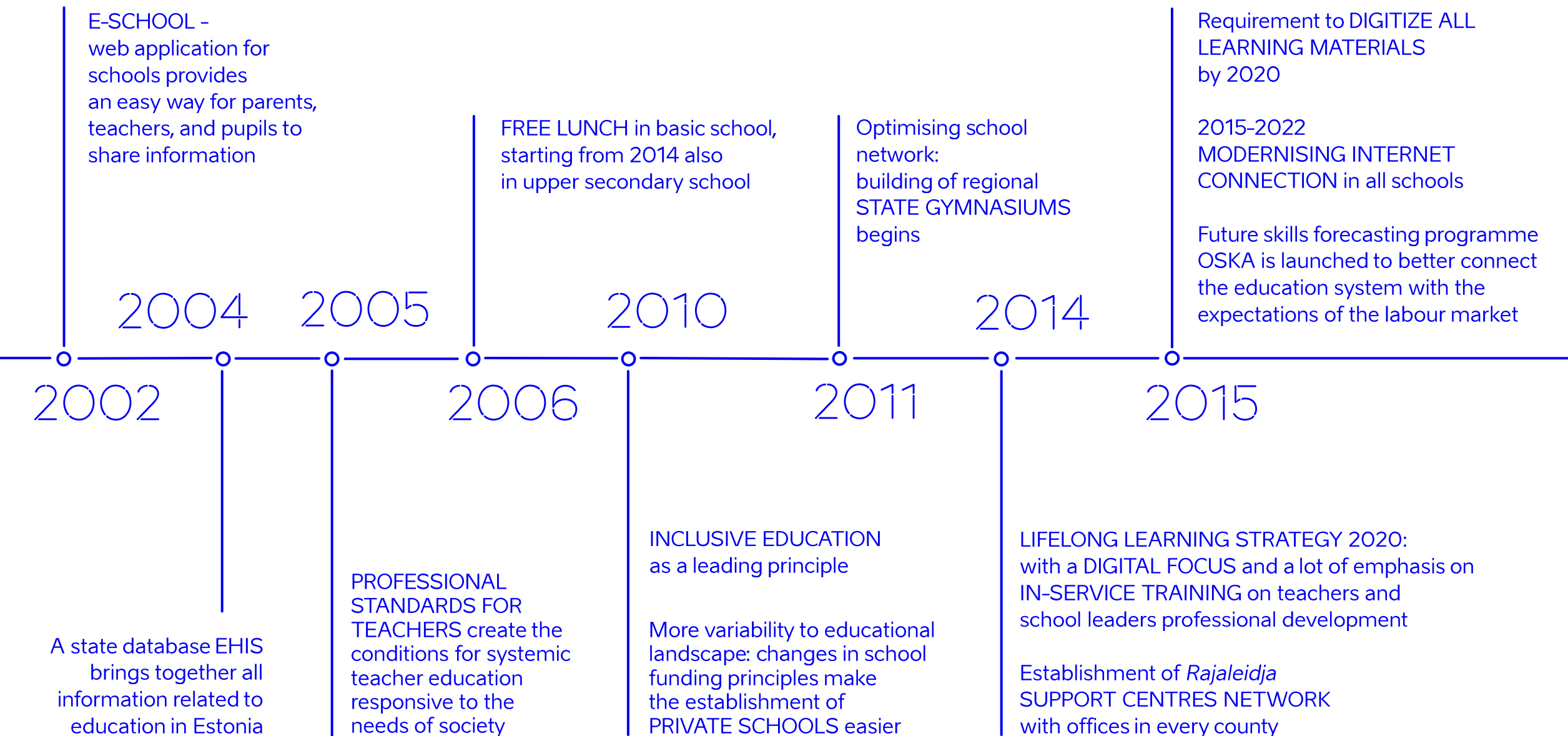
1991  
Republic of Estonia

The modernisation of Estonian education begins.



# Restart of the education system





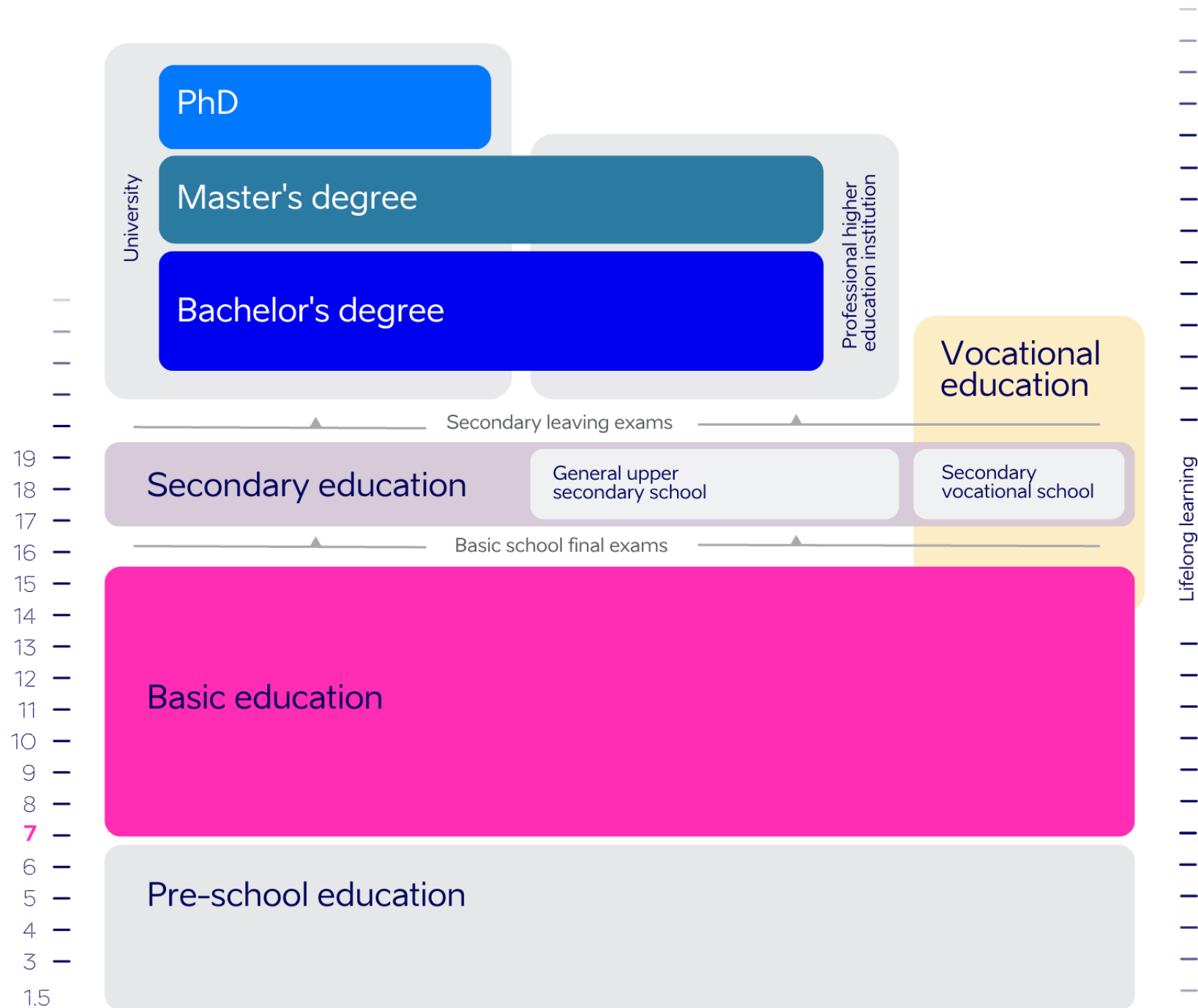
A photograph of two young children sitting at a table. The child on the right is a boy with blonde hair, wearing a blue sweater, holding a glass of milk to his mouth. The child on the left is a girl with blonde hair, wearing a red and white striped shirt, holding a knife and fork. They are both looking towards the camera. The background is blurred, showing other people and a table 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:  
+ 169 111 students  
+ 16 942 teachers  
+ 514 schools



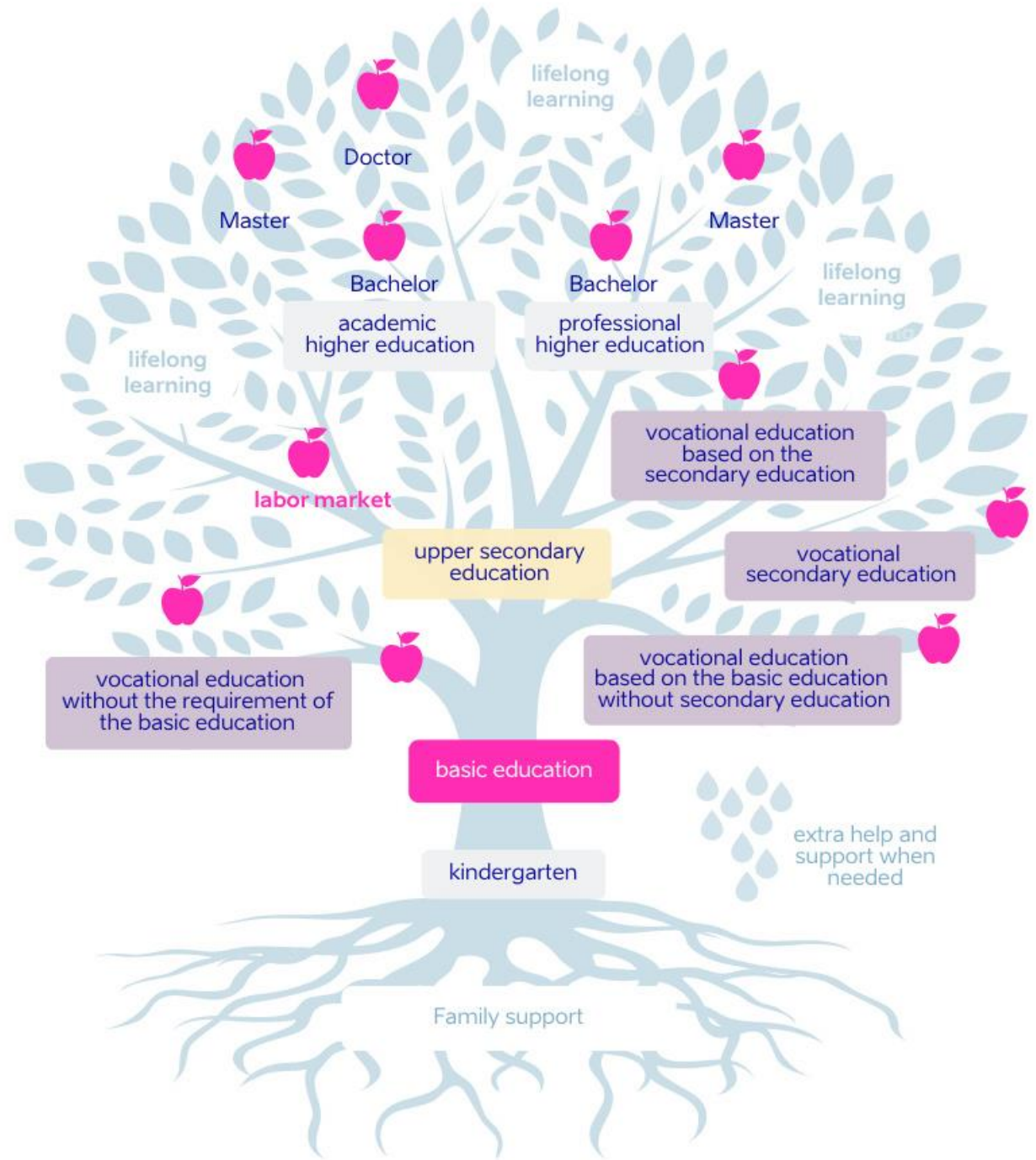


# Preschool: preparing for school

- + 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

# 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.





# Characteristics of Estonian education

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

# Preparing for the information society

95%

of schools  
use e-diaries

4th

in media literacy  
Media Literacy Index 2022

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 2018

40%

of ICT university students are female  
— this is highest share in Europe  
Informatics Europe 2020



# 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.
- + DIGITAL COMPETENCE is set in curriculum as a general competence.
- + Educational programmes create INTEREST IN TECHNOLOGY from kindergarten to university.
- + All schools in Estonia use E-SOLUTIONS.
- + Many schools and kindergartens have EDUCATIONAL TECHNOLOGISTS - technology integration specialists to support teachers.

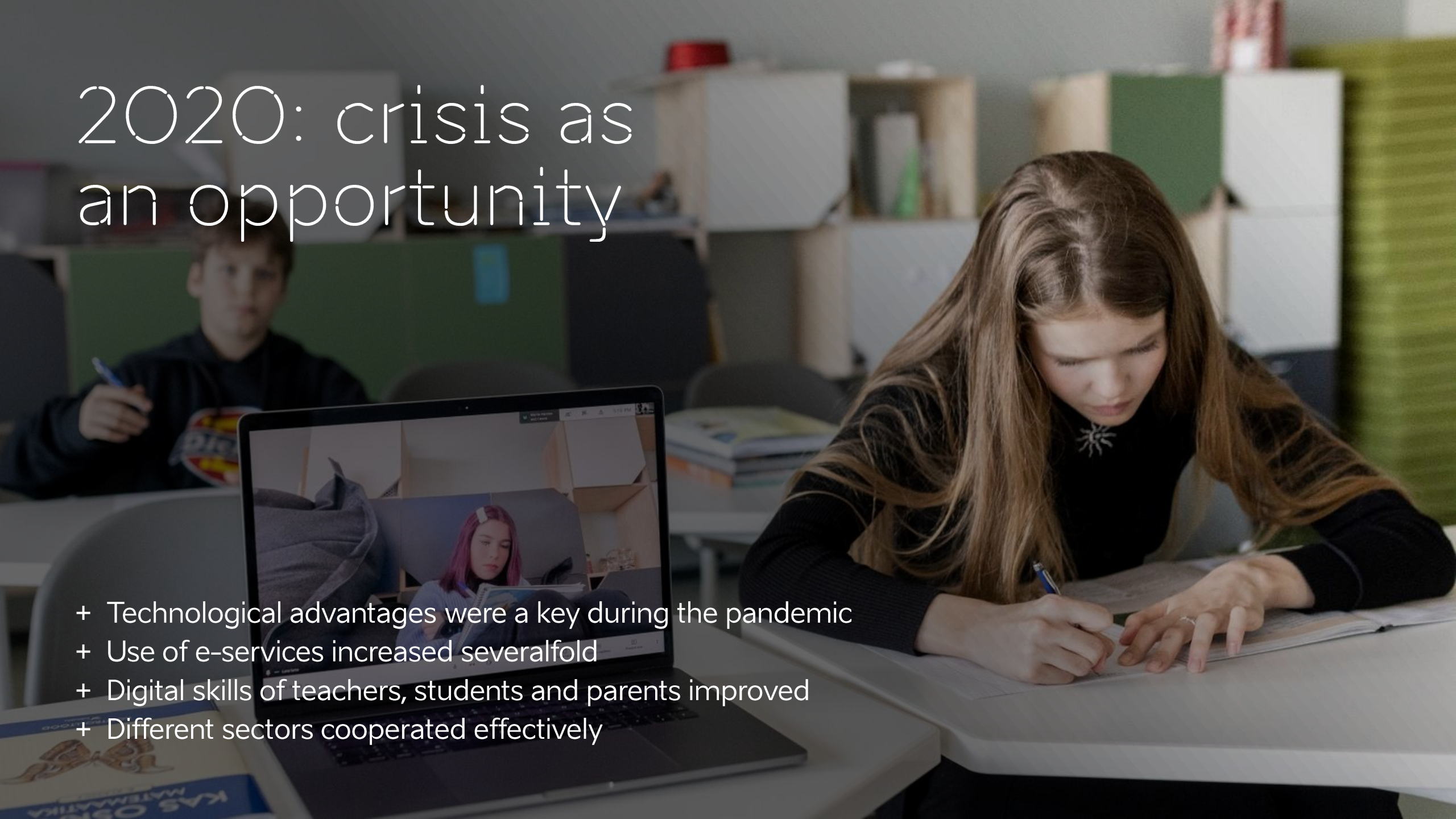
# Digital solutions are in everyday use

- + 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
- etc



# 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

- + 80% of the 7-19 year olds participate in hobby education or hobby activities
- + 90% of youth are satisfied with youth work and extracurricular activities (2020)





# 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!

education  
estonia



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Photos: Rénée Altnov, Aron Urb, Sven Zacek,  
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