

# e-Education



The educational digital revolution of Estonia aims to implement modern digital technology more efficiently and effectively into learning and teaching, to improve the digital skills of the entire population, and to ensure access to a new generation of digital infrastructure. In practice, this means that the digital culture is integrated into the process of learning at all educational levels and in all curricula.

Ensuring the technological support of education for management, teachers and students is a prerequisite for educational innovation inspired by technological innovation. The state, for its part, guarantees digital learning resources (e-textbooks and workbooks, open learning materials, etc.) for achieving the goals and learning outcomes set in the curricula of primary, secondary and vocational schools. This includes ensuring that every student has access to a personal digital device to access the modern digital infrastructure. To achieve this, digital competence assessment and recognition systems are created and implemented.

## e-School

To engage people in the digital society, the state has cooperated with the private sector to deliver several educational programmes (Tiger's Leap, Look@World Foundation, Come Along), involving approximately every 5th citizen. For example, the Tiger's Leap programme, connected all Estonian schools to the internet, established computer classes and ensured that teachers and students were all ICT competent — as a consequence, e-study methods are used daily in our schools today.

Two new programmes are currently under way to modernize the online networks of all schools, provide 1 Gbit/s internet access in all classes and procure modern digital equipment for all teachers.

## Young programmers

Several Estonian initiatives tackle the same issue — helping to uncover hidden talent and shaping the IT workplace of the future. To this end, there are opportunities for learning programming, robotics, and other modern technologies as early as pre-school.

Training courses are organized for teachers and competitions for young people, digital learning resources are created and the purchase of modern equipment is supported. Kindergartens have youth clubs, schools are integrating the teaching of digital skills into existing classes, and elective courses and hobby groups are offered. As much as 90% of general schools in Estonia offer classes in IT and technology, and 60% of kindergartens offer IT-based learning activities.

## Questions & answers

### What are the risks in a digitally revolutionized school?

Instead of risks, new challenges present themselves: the digital gap between teachers and students, cyber hygiene and avoiding cyber bullying, the existence of methodologies for the digital era and ensuring the necessary teacher training, as well as the threat of "over-digitalization".

### What are the critical success factors to help schools carry out a digital revolution?

The desire and ability of school owners to make the necessary investments, the initiative and support of the

principals for a digital revolution, the existence of techno-educational support both in and outside the school, and national support for the development of a digital infrastructure.

## Facts and figures

- In a situation where the number of high school graduates has decreased every year, ICT studies have managed to grow in popularity and even win over students.
- Every 10th student sets out to study ICT every year.
- More than twice as many students pursue ICT in Estonia than the average in other OECD countries