



What's the secret of Estonian education?

If you want to start early, start with the kids

If you want to secure a prosperous future, investing in education is one of the most effective ways to do so. The Estonian education system is a prime example of this. The 2018 PISA results show Estonian students ranked best in Europe and among the top performers worldwide in all measured fields. Additionally, Estonia has 1.5 times more top performers and 2 times fewer low performers compared to the OECD average.

Here are some of the factors that contribute to the success of Estonian education system:

Equal opportunities for all

Estonia believes in equal opportunities for all. Education is free from primary to higher education, and students receive free school meals and textbooks. Every child has the right to a good education, regardless of their socio-economic background. According to the [PISA 2018](#), only 6.2% of the variation in student performance is due to socio-economic background, compared to the OECD average of 12%.

Every student matters

With a focus on individual potential, Estonia's inclusive education approach ensures that every child gets the right support, be it those with special needs or the exceptionally talented. This encompasses free psychological services and dedicated programs for the gifted.

Highly educated teachers and autonomy

Estonian teachers are highly educated; a master's degree to work as a teacher and a bachelor's degree for a kindergarten teacher are required.

Estonia has a culture of trusting and empowering teachers. The curriculum only sets the results that children should know by the end of each educational level while teachers decide how to achieve those results. Parents and the state trust teachers to make the best decisions for their students.

Building a strong foundation with early childhood education

Estonia recognises the critical role that high-quality early childhood education plays in a child's development. Kindergartens in Estonia are not just for childcare, they are educational institutions with their own curriculum designed to prepare children for school. Although preschool attendance is not mandatory, almost 94% of children aged 4 to 7 participate, demonstrating parents' desire for their children to be well-prepared for their learning journey.

Blending tech and education

In Estonia, where 99% of state services are online, digital integration extends deeply into education. Since the e-diary platform eKool launched in 2002, a myriad of e-solutions, state-sponsored and private, have enriched the learning experience. Fueled by an entrepreneurial spirit and bolstered by research collaborations, Estonian EdTechs earn local and global recognition.

Tiger Leap into the future

Estonia's efforts to leverage technology for teaching and learning began in the 1990s with an ambitious [Tiger Leap programme](#) that kickstarted the digitalization of the entire public sector. The aim of the programme was to provide internet access to all schools. By 2001, Estonia had already met this goal. However, Tiger Leap also prioritised training teachers, students, and citizens to become tech-savvy, recognising that digital opportunities are only as good as the people who use them.

Digital literacy and teacher training

With a focus on digital literacy, [digital competence](#) is one of the core skills students develop across all subjects, as outlined in the national curriculum in Estonia. Teachers are also encouraged to create their digital skills through ongoing training, with one in five Estonian teachers participating in digital competence courses every year.

E-tests

Estonian schools also use e-tests to save teachers' time and make testing and feedback more efficient. In the coming years, Estonia plans to make final exams electronic, further streamlining the testing process.

Digital learning materials

In Estonia, all learning materials must have a digital version as well. This made the transition to distance learning in Estonian schools much smoother in 2020, as digital learning materials were already available for all education levels and subjects. It seems as if Estonia had been preparing for this for 25 years.

Data-backed decisions

Pragmatic Estonians value evidence-based decision-making. Since 2004, Estonia has been using the [Estonian Education Information System](#) to gather information on its education system. The database provides policymakers, educators, and researchers with a wealth of information on student performance, teacher qualifications, and more.

Infrastructure

Digital opportunities are only as good as the infrastructure supporting them. Recognising this, the Estonian government has invested in the [infrastructure of schools](#) to ensure that they have access to high-speed internet connections. This has allowed for a more seamless integration of digital tools and materials in the classroom, improving the learning experience for students and teachers alike.

Cybersecurity and media literacy

To create a cyber-aware society, Estonian education guidelines suggest students start taking the first steps in kindergarten. Also, media literacy is an important topic in Estonia. The results are evident – for several years in a row, Estonia has been in [the top 5 of the Media Literacy Index](#) along with the Nordic countries.

Shaping ICT education

To ensure that the country has a steady supply of IT professionals, Estonia has developed a comprehensive approach. This includes partnerships between the government and private sector to improve the quality of IT education and training, as it is in the [IT Academy programme](#), as well as a wide range of extracurricular activities, including technology clubs such as Unicorn Squad for girls.

When it comes to studying ICT, Estonia is leading the pack. With nearly 11% of all students studying ICT, Estonia is well ahead of the EU average, and the number of female ICT students in Estonian universities is increasing year by year.

Even kindergartens teach robotics

The Estonian state also wants children to develop a positive attitude toward technology at an early stage. Opportunities for learning programming, robotics, and other modern technologies are available as early as preschool. For example, the ProgeTiger programme launched in 2012, introduces children to the basics of coding and technology from kindergarten to vocational school. The programme is extremely popular, with 99% of Estonian preschools participating in it in some capacity.

Practical and entrepreneurial education

With the country's commitment to promoting entrepreneurship, innovation, and digital literacy, it is no wonder that Estonia boasts the highest number of unicorns per capita. In fact, entrepreneurship is also one of the key competencies in Estonian curricula, and creating student companies is popular in Estonian schools. Students know how to manage money - also demonstrated by the PISA test, where the financial literacy of Estonian students was the highest among the countries.

Learning beyond the classroom

In Estonia, learning extends far beyond traditional settings. Hobby education and youth work offer diverse opportunities to explore passions in music, sports, art, technology, and more. Environmental education is also emphasized, with a nationwide network of environmental education centres offering free educational programs and learning materials. These activities not only enhance talents but also foster creativity, build confidence, and create community connections, complementing school education seamlessly.

Engaging the next generation

In Estonia, youth voices matter. Young people actively shape their communities, from the right to vote in locals elections at 16, to widespread youth and student councils backed by law and state funding.

Lifelong learning as a lifestyle

Lifelong learning is actively promoted, with successful programmes like [Vali IT](#) offering the opportunity for people with no prior experience in the field to become IT professionals in a matter of weeks.

The best investment a country can make is to raise smart children

In conclusion, there is no single clear secret to the success of Estonian education. In international comparisons, Estonia's has been shining due to a systematic approach, including a commitment to equal opportunities, inclusive education, highly educated teachers, early childhood education, and fostering entrepreneurial spirit or digital innovation.