



PISA survey

- PISA survey, conducted by OECD, studies the knowledge and skills of 15-year-old students in functional reading, mathematics and sciences
- The survey measures the capability of 15-year-old students to generalise, connect and apply what they learn at school in everyday life.
- The survey is carried out in every three years.
- Estonia participated for the fourth time.

PISA 2015 in Estonia

- 72 countries participated in total, including all developed industrialised countries.
- Half of all the 15-year-old students in Estonia, that is 5,587 students (2,788 girls and 2,799 boys) from 206 schools, took the PISA test.
- 78% of the students took the test in Estonian and 22% in Russian.
- In Estonia the test was completely in electronic form. The main focus of the survey was on sciences.

Estonian results in 2015

- The results are stable and very good in all subjects. Basic education provided in Estonia is one of the best in Europe and in the world.
- Very good results are achieved with lesser financial resources and shorter learning period than in other OECD countries.
- The number of top performers has increased across all evaluated subjects and the number of students with weak results in reading has diminished.
- The most progress has been made in functional reading, especially among boys.

Sciences

- Estonian students' skills and knowledge in biology, geography, physics and chemistry are one of the best in the world.
- Estonian students are 1st in Europe and 3rd in the world after Singapore and Japan with an average result of 534 points (OECD average is 493).
- Compared to previous tests there are more (13.5%) students, or top performers, who can solve complex and very complex exercises (the average is 8% in OECD countries).

- More than 90% of Estonian students have at least basic level knowledge in all science subjects, which are biology, geography, physics and chemistry.
- Among the European countries, Estonia has the smallest number of students whose skills are below basic level.
- There are no differences between boys and girls when it comes to knowledge in sciences.

Mathematics

- Estonian students' maths knowledge is 2nd in Europe after Switzerland (sharing 1st and 2nd place) and 9th in the world with an average score of 520 points (OECD average is 490).
- 14.2% of Estonian students are top performers in maths (OECD average is 10.7%).
- Almost 90% of Estonian students have at least basic level knowledge and skills in maths, which takes Estonia among the top 5 of the top countries in the world.
- There are no differences between boys and girls when it comes to knowledge in mathematics.

Reading

- Estonian students' reading skill is 3rd in Europe after Finland and Ireland, and 6th in the world with an average score of 519 (OECD average is 493).
- The results of the Estonian students have improved significantly since 2006.
- Number of top performers in reading has grown 5% compared to 2009 and the number of students with lower results has decreased. There are not many countries that can show a similar trend.
- If in PISA 2012 the difference between boys and girls was 44 points then in 2015 the difference was only 28 points. Similarly to other countries the increase is more prominent in boys' reading skill.

Estonian student

Socio-economical background

- 48% of the students with low socio-economical background achieved very high scores in sciences. With this result Estonia is 1st in Europe and 6th in the world.
- Estonia is among the top ten countries in the world where four students with low socio-economical background out of ten achieved very good results.
- Home environment affects learning results very little, only 8%.

Estonian students' future plans and spare time

- Among the OECD countries, IT is the most popular field among Estonian 15-year-olds. 12.5% of Estonian top performers wish to work in that field in the future.

- Compared to previous tests, more students have a clear vision of their future profession. If in 2006 the percentage of students who did not know what to say about their future career was 26, then in 2015 the volume of these students was 15%.
- The most popular future profession was company or business manager, which was followed by IT specialist, lawyer, doctor, psychologist, programmer and chef. Many teens also mentioned the professions of designer, musician, actor and coach.
- 43% of Estonian students wish to obtain higher education, that is, reach a bachelor, master's or doctoral degree. More than fifth of the students hope to obtain applied higher education.
- Students in Estonian language schools are more oriented to academic higher education; students in Russian language schools are more set on applied higher education.
- Sports are a popular recreation among students. Only 5% of the students admitted that they are not engaged in any medium or intense physical activities.

Estonian school

- There are 569 students in Estonian school on average (OECD average is 762).
- Compared to other participating countries the Estonian students' results do not differ very much in terms of schools, only 16.8%.
- Estonian students spend on average 1,527 minutes per week on studying in school, which is less than in most OECD countries.
- Estonian school offers the students many possibilities to participate in different science competitions; in this matter Estonia is 6th in the world.
- In Estonia, rural schools and schools with lower socio-economic background have more computers than city schools and schools with stronger socio-economic backgrounds.

How to explain the good education in Estonia?

The first and foremost explanation is the Estonian student, teacher and school.

- In Estonia, education is highly valued and basic education has been very strong for decades. According to the international adult skill survey PIAAC the skills of Estonian 50–60-year-olds with basic education are top level compared to the OECD countries.
- Estonian educational system is based on equality and the *comprehensive school* principle. Students are not selected based on academic capabilities or results. Schools must provide the best learning environment for everyone regardless of their family's home environment or income. Significant amount of attention is paid on students with special educational needs.
- Estonian school and teacher have great autonomy. At the same time observation of results is conducted on state level and in schools. On state level it is agreed what kind of results the students must reach. How the results are reached is up to the professional teacher.
- Education is a priority both for the state and local governments. Despite the recession Estonia increased the educational costs per students by 30% in 2005–2012. Teacher's salary in Estonia has increased by 40% during the past five years.