

PISA survey

- PISA tests the skills and knowledge of 15-year-old students in mathematics, reading, and science.
- The survey measures the ability of 15-year-olds to analyze, reason and apply what they learn at school in everyday life situations.
- The survey is carried out every three years.
- Estonia participated for the fourth time.

PISA 2015 in Estonia

- 72 countries and economies participated in total, including all developed industrialized 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 computer based. Science was in the focus.

Estonian results in 2015

- Estonian students have maintained high results in all domains of assessment. Estonian education system is one of the best in Europe and in the world.
- Very good results are achieved with lesser financial resources and shorter learning time than in many other OECD countries.
- The number of top performers has increased across all assessed domains and the number of low performers in reading has decreased.
- The biggest improvements have been made in reading, mostly among boys.

Science

- Estonian student skills and knowledge in biology, geography, physics and chemistry are among the best in the world.
- Estonian students are 1st in Europe and 3rd in the world after Singapore and Japan with the mean score of 534 points (OECD mean is 493).
- Compared to previous surveys there are more (13.5%) top performing students who can solve complex and very complex tasks (OECD mean is 8%).
- More than 90% of Estonian students have reached baseline 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 the baseline level.
- There are no differences in performance between boys and girls in science.

Mathematics

- In mathematics, Estonian students are 2nd in Europe after Switzerland (sharing 1st and 2nd place) and 9th in the world with 520 points as a mean score. (OECD mean is 490).
- 14.2% of Estonian students are top performers in math's (OECD average is 10.7%).
- Almost 90% of Estonian students have reached baseline knowledge and skills in math's, which places Estonia among the top 5 of the top performing countries in the world.
- There are no performance differences between boys and girls in mathematics.

Reading

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

Estonian student

Socio-economical background

- 48% of the students with low socio-economical background achieved very high results in science placing Estonia 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.
- Socio-economic background affects student performance very little, only 8%.

Estonian students' future plans and spare time

- Among the OECD countries, IT is the most popular future aspiration among Estonian 15-year-olds. 12.5% of Estonian top performers wish to work in that field in the future.
- Compared to PISA 2006, more students have a clear vision of their future profession. If in 2006 the share of students who did not know what to say about their future career was 26%, then in 2015 the amount of such 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

- Compared to other participating countries between school difference in Estonia is quite small, 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 schools offer the students many possibilities to participate in different science competitions; Estonia is 6th in the world accordingly.
- In Estonia, rural schools and schools with lower socio-economic background have more computers than urban schools and schools with higher socio-economic background.

How to explain the good education in Estonia?

The first and foremost explanation is the good job done by 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 abilities or test results. Schools must provide the best learning environment for everyone regardless of their family background or income. Significant attention is paid to students with special educational needs.
- Estonian school and teacher have great autonomy. At the same time monitoring of results is conducted on state level and in schools. On state level set learning goals determine what students should master. 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 student by 30% in 2005–2012. Teacher's salary in Estonia has increased by 40% during the past five years.