

The OECD report: purchase research papers

The organization for economic cooperation and development (OECD) is engaged in large-scale analytical work, including in the field of educational policy. Recall that the organization currently has 34 participating countries (most of which are representative of the EU), and Russia is trying to join the last couple of years (post-Soviet countries, only Estonia joined the OECD).

This time the report is called Students, Computers and Learning: Making the Connection ("Students, computers and learning: linking"), and this is the first of its kind international attempt to conduct a comparative analysis of the digital skills obtained by students, and how [purchase research papers](#) learning environment promotes the formation of such skills.

Data on the use of ICT at school, at home and on the formation of digital skills among secondary school students gathered in 29 OECD countries and 13 partner countries (Russian Federation included in this list) in the countries participating in the international test PISA-2012. Investigated the link between mathematical literacy and the use of ICT in school, skills in searching the Internet, General technology security in schools and the effectiveness of pedagogical practices.

Why is it important to explore?

Modern times amazing, at least what today's kids actively use for communication, work and study the instruments with which not all adults had time to get acquainted. This is a distinctive feature, challenge and sorrow of our time. From generation to generation until the second half of the XX century adults gave the children their skills and knowledge about the world, which was familiar; and then the world began to change so quickly and so dramatically that the adults do not manage to grasp these changes and the children are already using the latest achievements.

Therefore, before the formation of today face issues — and what should we teach in schools, if they have ceased to be a place where we get our information? What is the role of the teacher is that he should be able to, what skills we need to pass on to children? Of those skills, necessary in today's world we can vouch for is the skills of reading and writing, information retrieval, meta-subject skills, reshenii tasks and operations with systems of symbols (in fact, math skills). It is these skills of today's students and evaluated in the slice of various countries.

One of the interesting results

Most online (more than 4 hours a day) children spend in Denmark, Estonia, China, Norway and Sweden — more than 40% of respondents. Least of all the children of Ireland, Korea, Mexico and Turkey (less than 40% of respondents). For entertainment purposes (social networking, watching movies and listening to music) the computer is used most often in Estonia and the Czech Republic; least often in Japan, Korea and Mexico.

And, by the way, revealed a certain regularity between time spent by students on the Internet, and their well-being in the school team. So guys, conducting more than 6 hours a day on the Internet, twice as likely to report feelings of loneliness at school compared to boys who devote the Internet 1-2 hours a day.

Another finding: limited access to ICT during lessons in school, as a rule, better effect on performance than their complete absence; however, excessive use of ICT (in developed countries) leads to a significant decrease in performance. But, of course, extremely difficult to trace a clear causal relationship: in the end, the equipment can be purchased/school administration can make a decision about experimental approaches using ICT in order to improve student achievement; and what happened earlier to find out it is not possible.

Of ICT in the classroom matematicii

There is such an interesting pattern: the teacher of mathematics, which students rated as more studentoriented, using an individual approach and project methodology, are more likely to use digital technologies in their lessons (for example, to check for jobs, for feedback or for group work). Another curious fact: some countries reported the improvement of discipline in the lessons where ICT is used (for example, in Australia, Denmark, Norway, Switzerland, China) and in others, on the contrary, a significant deterioration (Czech Republic, Greece, Hungary, Israel, Mexico, Portugal, Serbia, Slovakia, Slovenia, Turkey, Uruguay). A possible explanation is in the first group of countries, the ICT in schools started to be applied much earlier than in the second group, respectively, and pedagogical experience in the use of digital technology in the classroom has accumulated much more.

Concentration in Internet search

The most important skill of modern man — the ability to navigate in the information flow. This aspect is paid great attention in the study. To determine the nature of the interaction investigated with digital content, we have analyzed the log files, which record the sequence of visited pages by students on the test platform when performing certain tasks. The effectiveness of the performed actions were compared with the pre-built routes of action, which allowed to find out how purposefully each subject solved the task on the basis of this and several other important criteria determined the quality of web activity. This, of course, a simplified algorithm study, but overall the analysis was something like (all this a whole

Chapter is devoted in the report).

If you look at the sign below, we will see data about the quality of the Internet surfing students from different countries. Blue highlighted those countries where the percentage of divergent students is quite high (that is, the activity was registered, but the rather messy).

They want to see it again and in conjunction with the dark blue on the chart, which shows high concentration in the search. For example, in Singapore a large number of children with chaotic behavior in the network, and Vice versa, with exceptionally sosredotochena. But in Russia, as you can see, skills, wandering on the network is poor.

The use of ICT in education almost does not help in reducing the learning gap. In other words, at the moment, much more important goal is to ensure that the education of children, prozhivayushih in the territory of OECD member countries (and that includes countries with a difficult political and economic landscape — Chile, Mexico and Portugal) all necessary skills in the area of numeracy and reading. Much more important than providing access to novation technological devices.

Apparently, a deep understanding of concepts and complex thinking possible to build (what a surprise!) only through active interaction of students with each other and with the teacher; technology from this crucial process, it can distract. In addition, still have not developed effective pedagogical approaches that might benefit from the use of the advantages of the digital age: the pedagogical practice of the XX century totally unsuitable to the digital environment of the XXI century.

Student, "copypaste" answers in the homework, it is unlikely to become smarter. If we want our children to be smarter than their smartphone, we need more intelligent, more modern, more advanced pedagogy.

But digital technologies are the only way to make education accessible to all; make training materials are regularly and timely updated. Technology gives us tremendous opportunities to share information — both for teachers and for students; it is the only true path to the safe use of technology in the classroom — their use in project-oriented activities, training, joint work with virtual and remote laboratories, creation of interactive manuals and training simulations.