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[Home](#) > The main directions for improving the functional literacy of Kazakhstani school students based on TIMSS and PISA results

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"For being able to compete with developed countries we have to become a highly educated country "

N. Nazarbayev

Our country has huge possibilities for improving the functional literacy of students. Functional literacy is education and human skills, the indicator of personal development. The main goal of youth is to contribute for becoming of our country among 30 developed countries in the world. At the same time, large-scale student assessment of the quality of education is needed to analyze on basis of international comparative studies' results.

What benefits the country's participation in international studies gives?

- Improvement of education monitoring and assessment;
- Integration of Kazakhstani education system into the world education;
- Modernizing of the educational curriculum, the creation of Kazakhstani control system of the quality of education;
- Creation of opportunities for national personnel development.

Analyzing of different factors in the international studies demonstrates particular features of participating countries. Questionnaires provide a comprehensive assessment not only for educational process, but also for necessary conditions of the student development in his family.

Influence of background information to education is used in several international projects, including an independent objective assessment of experts in TIMSS and PISA.

In 2007 for the first time 4 grade students took part in the international study TIMSS (Trends in Mathematics and Science Study). Among 36 countries, participating in the study Kazakhstan took the 5th place in mathematics (549 points out of 1000) and the 11th place in science. Thus, Kazakhstan has not only demonstrated excellent results, but also exceeded the average international values (math - 549 points, science - 533 points). In general, our students took the 7th place in the study.

However, recently these results have decreased. Results in the study in 2011 were lower

than the international average. Kazakhstani 4 grade students achieved 501 points in mathematics and 495 points in science according to 1,000-point scale.

In April, 2015 more than 500 thousand students of primary and secondary schools participated in TIMSS-2015 together with other 56 countries of the world. 9579 students of 4th and 8th grades represented Kazakhstan in competition with their peers from other states.

One of the indicators of Human Development Index - education is based on results from the Program for international Student Assessment - PISA that involved 15-year olds. Knowledge of students in 3 directions (mathematics, science and reading) is evaluated in the study. Kazakhstan has been participating to this research since 2009. In 2012 the Organization for Economic Cooperation and Development noted the improvement of Kazakhstani participants' results on 27 and 25 points in math and science respectively. In 2015 7842 Kazakhstani students took part in the study among 71 countries. Huge work for functional literacy development in the country was done and we hope that PISA-2015 results will be high.

TIMSS-2015 and PISA-2015 results will be published by the IEA and the OECD in December, 2016.

It should be noted that the experience of participating in the international studies contributes not only for improving the quality of education indicators, but also for further strategic development. Nowadays, we can see the rapid updating and constant development of education and science, engineering and technology. In this regard, it is necessary to be prepared to mentioned changes. We need to know all the factors that contribute to the education system significantly. There are the following student features as leadership, initiative and entrepreneurial skills, teamwork, flexibility, the ability to solve any problems correctly and accurately, competently express thoughts in writing form and orally.

Our country has taken different measures for improving and updating of education system. Kazakhstani education system is modernized taking into account the best international practices. This academic year 30 pilot schools have started to work on the implementation of state educational standards of primary education. Which benefits will we have? For example, if the current content of education answers the question "What can we learn at school?" and it depends on theoretical knowledge (i.e. child knows and understands), but the updated content of education answers the question "Why do I have to go to school?" This content is directed to the formation of different skills for future good results. For this reason, new disciplines were introduced. In primary school, there are two new subjects: "Science", "Information and Communication Technologies", and the content of "Knowledge of the world" subject was updated. This project is implemented according to the 76th and 89th steps of Nation Plan "100 certain steps for implementation of five institutional reforms" of the Head of State. Phased radical modernization of state educational standards will allow updating the school curriculum successfully and improving the functional literacy of Kazakhstani students.

At the same time, professional qualifications and role of teacher as person in education system is very important. The key aspect of education curriculum's updating is teacher training. What training and quality of education need to be? How will teacher diagnose

intellectual and creative abilities of students? These issues are interesting not only for teachers, but also for personnel that involved in education. Most teachers in the classroom transfer the information. The organizational structure of a modern lesson shows that teacher explanation is not enough to students for understanding the new material. The learning process is not possible without active participation of student, he or she should not be a passive listener.

Thus, at the present time it is very important to reveal student abilities and to generate his/her interest in learning. Every teacher should improve his professional skills and use such technologies. In this context, teacher's development is used systematically in our country. Particularly, multi-vector professional programs, training manuals and digital educational resources are used for improving the effectiveness of teachers within global trend. It should be noted there are some tutorials for teachers for functional literacy development of students: «The international study PISA», «The international study TIMSS» and «Progress in International Reading Literacy Study PIRLS». Mentioned tutorials give the necessary information about international study PISA and its main directions (mathematics, science and reading), tests from previous TIMSS study cycles. Tutorial for PIRLS designed for successful preparation for the upcoming study in 2016. These are guidelines for secondary schools teachers, preprimary education teachers, undergraduates and students of pedagogical universities and anyone who interested in youth problems in education.

Another mechanism for increasing of student functional literacy is parental involvement in their children's education. PISA consortium interviewed international test participants on various aspects of their socio-cultural status to assess the impact of socio-economic factors on student performance. These questions concerned the availability of students' own room and personal tables for doing lessons, educational software (electronic books), Internet access, classical literature, encyclopedias, dictionaries, paintings, etc.

International experts point out that over 90% students in OECD countries have all necessary conditions for adequate education at home. In leading countries such as Shanghai-China, Singapore, Korea, the average number of books of home library is from 150 to 244. Average Kazakhstan student have 156 books, and only 55% of Kazakhstani participants have access to Internet.

International experts believe that possession of computer with Internet access not only at school but also at home is one of the important conditions for the development of student functional literacy (the ability to extract the necessary information and understand the content).

In other words, the Internet should be used only for information needs. However, it is necessary to limit an access to web-sites which affect the mental health of children. There are special services for limitation of children's access to such sites. For example, the function "Parental Control" will ensure the safety of children and limit "unnecessary flow of information". Furthermore, different services are available to limit the right of access to sites with negative content depending on children's age.

At the same time, there are sites which help for intellectual education, child's development. Today we can say that 90% of students receive knowledge from Internet. Internet is fast and

modern source of education. Thus, it is necessary to increase the culture for using this source.

The twenty-first century is the era of fierce competition. The main areas of student functional literacy growth in Kazakhstan are updating of education curriculum, improving teacher skills and keeping the family's role in student life.

We believe in the future the work of the entire teaching community in our country will be fruitful, and Kazakhstani youth will reach good results in international comparative studies.



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[Nagima Sabitova](#) [1]

Manager, Department for International Comparative Studies

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- [International comparative researches](#) [3] [The main directions for improving the functional literacy of](#)



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