IMPROVING LITERACY ON THE BASIS OF PISA REQUIREMENTS

Azamat Quvondikovich Matyakubov
Chirchik State Pedagogical Institute of Tashkent region

ABSTRACT

An article about the purpose of the PISA program and what it is (PISA). Reading literacy, math literacy, natural science literacy. My research project is a methodology for improving the teaching of natural sciences based on the requirements of the International Science Assessment Program (PISA) based on natural science literacy.

Keywords: PISA (Program for International Student Assessment), PISA tests, Science Literacy, Pedagogical Technology, Analysis.

INTRODUCTION

According to the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan [1] "On measures to organize international research in the field of education quality assessment in public education" dated December 8, 2018 No 997 PISA-2021 - International Economic Cooperation agreement with the Organization for Cooperation and Development (OIC). Participated in the International Program for the Assessment of Student Literacy (Agreement for International Student Assessment - PISA - 2021) between the Inspectorate for Quality Control in Education under the Cabinet of Ministers of the Republic of Uzbekistan and the International Cooperation Research Organization. PISA (Program for International Student Assessment) is an international program to assess student literacy. Literacy in the natural sciences requires the provision of short-term and reliable information, creating the necessary conditions for them to master the basics of various sciences [2].

METHODS

PISA (Program for International Student Assessment) is a program that assesses the intellectual literacy (reading, mathematics, natural sciences) and the ability to apply the knowledge of 15-year-old students in different countries.

This program is held every 3 years. It was first developed in 1997 and was first used in 2000. Tests are conducted every three years to assess students' knowledge of this program. To date, a total of 7 tests (2000, 2003, 2006, 2009, 2012, 2015 and 2018) have been conducted under the PISA program, and the next tests are scheduled for 2021. Our country is also preparing to join this program in 2021.

Why are PISA surveys conducted every three years?
The main task of PISA is to provide member countries with information on education policy and support them in decision-making. The survey, conducted every three years, allows countries to provide timely information, including data and analysis, to take into account the impact of political decisions and relevant programs. At the same time, it allows countries to identify goals to be achieved in the future in their education system during this period.

Why exactly do 15-year-old students participate in PISA surveys?

The main reason for conducting the survey among 15-year-old students is that in most member countries of the Organization for Economic Co-operation and Development (OECD), the final stage of the 15-year compulsory education is. This is the period when the formation and development of students' intellectual abilities and capabilities is at its peak. At this age, there is a period of awakening their interest and interest in innovations, increased propensity for information and communication technologies, and rapid reception of information [3,4,5].

What competencies are based on in assessing literacy?

We will consider these competencies based on the competencies used in the formation and development of students' intellectual literacy in the natural sciences:

1. Competence in scientifically explaining the process by dividing it into stages.
2. Competence to design, evaluate and identify problems based on the situation, with a comprehensive approach to research.
3. Competence in scientific prediction of data prediction, collection, storage, processing sequence, and identification of functions based on evidence from the problem.

What are the requirements for PISA assignment levels?

They are divided into three cognitive levels according to the intellectual and thinking ability required to complete and develop the task:

1. Lower level - one-step actions.
2. Intermediate - classification and description of events.
3. High level - analysis based on a sequence of complex data prediction, collection, storage, processing.

However, the purpose of participation in this program is not to conduct targeted tests or prepare students for theoretical tests, but to help our students to form and develop natural-scientific intellectual skills through a correct interpretation of events in the XXI century. It is to create a solid foundation for bringing Information and communication technologies, educational tools and methods are no exception [6,7,8].
DISCUSSION

What is the purpose of the PISA program, what is the need for it, and on what principle are PISA questions structured?

In the twentieth century and earlier, professionals with strong memory, encyclopedic knowledge, and as much information as possible in their field were highly valued, but now this knowledge is no longer crucial. Search engines, online encyclopedias, and excellent online databases by industry have been created, and the need to remember this information has become secondary.

In the modern specialist, the ability to analyze this knowledge, to generate new information from it, to see, in the vernacular, the "half cup under the bowl" is gaining priority.

PISA tests are designed to reflect the same changes in the education system, to determine the extent to which students are able to analyze, draw conclusions, and communicate real-life events, and to see how well the education system adapts to these changes.

What is the essence of the international evaluation program?

The fact that the reforms implemented in our country in recent years have resulted in huge economic growth, further increases the demand for qualified personnel and advanced specialization in all areas. This requires increasing the interest of spontaneous students in lessons and increasing the focus on comprehensive education of students. The fact that the above requirements are very important for the education system means that, as in most foreign countries, it is necessary to attract best practices to improve the quality of education by assessing and monitoring the development of education and science.

What does participation in international research on education quality assessment mean for Uzbekistan?

First, the results of the study allow us to draw conclusions about the quality of education in the country and its role, taking into account international standards. Second, it will be used to reform the national education system, improve the content of education, training and retraining of teachers, and create a new generation of textbooks by specialists. Third, international research has a positive impact on the quality of national research in education. Fourth, it allows the creation of a national evaluation system based on high economic efficiency at the level of international standards. Fifth, Uzbekistan will develop a culture of monitoring research in our local specialists through participation in international research with the involvement of leading experts from various organizations, leading to compliance with international standards for assessing the quality of education. Sixth, it allows the development of control materials in the
National Education Quality Assessment at the level of quality of control materials used in international research.

CONCLUSION

Literacy: The competence to substantiate and draw conclusions from problems that can be solved scientifically in life events (physical and chemical phenomena) through prediction, detection, observation and experimentation. These findings are the main goal of understanding and comprehending the world around us and the changes that occur in it as a result of human activity, and the formation and development of the ability to make the necessary decisions accordingly.

REFERENCES

1. Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated December 8, 2018 No 997 "On measures to organize international research in the field of assessing the quality of education in the public education system."
3. Azamat Matyakubov Formation of students' intellectual abilities in the process of teaching general and inorganic chemistry // Society and innovations. 2021. № 5. Pages 470 - 477