THE IMPORTANCE OF PISA ASSESSMENT RESEARCH IN THE INTERNATIONAL EDUCATION SYSTEM OF THE REPUBLIC OF UZBEKISTAN

Abstract: The article provides a detailed analysis of the role of PISA assessment research in the internationalization of the education system of the Republic of Uzbekistan and the development of these processes on the basis of international and local scientific literature and Internet materials as well.

Key words: Uzbekistan, education system, Pisa assessment research, students, development, mathematics, natural sciences, reading.

Language: English

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Introduction

Trends in the development of education quality assessment systems at different levels in the era of global change, the participation of the Republic of Uzbekistan in international comparative research on education quality assessment is considered as an opportunity to increase the capacity of the education system. International comparative research on education quality assessment will encourage the use of comprehensive analysis of results, assessment of students’ reading, natural sciences, mathematical and creative thinking literacy, methodology of international research and evaluation criteria to create national teaching materials and measurement materials.

The Decree of the President of the Republic of Uzbekistan dated April 29, 2019 “On approval of the Concept of development of the public education system of the Republic of Uzbekistan until 2030” [3] was adopted. The decree was adopted in order to “determine the priorities of systemic reform of general secondary and extracurricular education, raise the spiritual, moral and intellectual development of the younger generation to a qualitatively new level, the introduction of innovative forms and methods of education”. The decree states that “by 2030, the Republic of Uzbekistan will be among the top 30 developed countries in the world in the ranking of the International Student Assessment Program PISA (The Program for International Student Assessment)”. The concept approved by the decree, in turn, sets out the main tasks to be done for this. In particular, such tasks as “improvement of teaching methods, the gradual application of the principles of individualization in the educational process” have been identified. The concept also reflects some of the problematic issues in the public education system. In particular, “outdated content of textbooks on pedagogy and methodology”, “unsatisfactory methodological support of teachers”, “lack of diversity in the system of creating textbooks, monopolizing their creation and publication”, “their content, methodology and quality of publication” negative impact. In turn, “although state education standards are based on competency-based assistance, teaching and assessment methods, as well as textbooks and other teaching materials, are primarily focused on memorizing and capturing information, hindering the development of critical thinking, independent information search and analysis skills, and other skills. “It is necessary to improve the quality of textbooks used, to establish the practice of using...
RESEARCH METHODS

The third chapter of the concept, entitled “The main goals and directions of development of the public education system” states that “innovative development of the economy in the general education system, the creation of opportunities for quality education in accordance with international best practices and modern society; Development of human capital as a key factor in determining the level of student competitiveness in the labor market and in the country as a whole” is a strategic goal of the public education system. The concept envisages “the creation of a national system for evaluating the quality of education in PISA secondary schools, aimed at assessing the level of literacy of students in reading, mathematics and science in order to organize international research in the field of public education quality assessment”.

Chapter 4, “Expected Outcomes of Concept Implementation”, introduces STEAM curricula and new state educational standards that meet the requirements of a modern innovative economy, with a special emphasis on the development of STEAM disciplines and critical thinking, independent information retrieval and analysis competencies [1], however, “international programs and research to assess the quality of education in assessing the level of knowledge of students in the public education system” (PISA, TIMSS, PIRLS etc.) of the Republic of Uzbekistan as a permanent secure the participation of the main results. PISA and PIRLS assessment programs have been translated into more than 200 assignment groups for testing and have been approved by international linguistic centers [4, p.77]. 20 video lessons and videos dedicated to the development of creative and logical thinking skills of students, 7 sets of teaching aids and assignments, including 4 manuals were published, distributed to all schools and posted on social networks.

RESULTS AND DISCUSSIONS

The establishment of the PISA International Assessment Survey in Uzbekistan and the participation of the relevant ministries and departments in the PISA and TALIS international surveys conducted by the Organization for Economic Cooperation and Development are determined by the Cabinet of Ministers. According to this document, the State Inspectorate for Education Quality Control, the Ministry of Public Education, Foreign Affairs, Justice, Innovation Development, Finance and Economy on participation in international PISA and TALIS surveys conducted by the Organization for Economic Cooperation and Development of the Republic of Uzbekistan and the State Inspectorate for Education Quality Control Approved the proposal to establish a foreign textbooks as additional and alternative teaching materials” [2, p.16] sideways.

| Impact Factor:          | ISRA (India) | SIS (USA) | ICV (Poland) | JIF (USA) |
|-------------------------|--------------|-----------|--------------|-----------|
| ISI (Dubai, UAE)        | 4.971        | 0.912     | 6.630        | 1.500     |
| PHHH (Russia)           | 0.829        |           | 1.940        |           |
| GIF (Australia)         | 0.564        |           | 4.260        |           |
| ESJI (KZ)               | 8.716        |           | 0.350        |           |
| JIF (Japan)             | 5.666        |           |              |           |

“National Center for International Research” to assess the quality of education. The main tasks and areas of activity of the National Center are: participation as a national representative of the Republic of Uzbekistan in the organization and coordination of international evaluation programs and competitions; ensuring coordination of activities of governmental and non-governmental organizations on the development of literacy and the ability of students to apply their knowledge in practice; Carrying out scientific research aimed at the development and implementation of innovative methods for the development of literacy in education, mathematics and natural sciences in the education system; establishment of international relations in the field of education quality assessment, development and implementation of international projects; participation in the organization and holding of international scientific conferences and symposiums; conducting fundamental and applied research in the field of education quality assessment; Comparative assessment of the quality of education in Uzbekistan and other countries of the world; scientific and methodological support for research to assess the quality of education; Systematic monitoring of the implementation of international assessment programs in the educational process, dissemination of best practices in this area and participation in the development of recommendations and guidelines for educational institutions on its basis; Ensuring the participation of students in international research such as PISA, TIMSS, PIRLS, as well as the study of the teaching and learning environment in general secondary schools and the working conditions of teachers by TALIS; regular monitoring based on an objective assessment of students’ literacy and international comparisons; international comparison of development trends of the education system; preparation of educational and methodical recommendations on native language, mathematics and natural sciences using innovative teaching methods.

In particular, the connection of secondary schools to modern information communications (computer, modem, projector) and the Internet, preparation for participation in the PISA international assessment program affects not only the target groups, but the whole learning process in school [5, p.54]. There is a need to identify and develop the abilities and talents of students from the lower grades and on this basis to develop programs to ensure the participation of students in international assessment programs and competitions to assess literacy. This, in turn, requires changes and additions to the content of state educational standards, curricula and textbooks in reading, mathematics and natural sciences, based on the results of international research. On the basis of these curriculum, the methodological and didactic approach to teaching will be radically considered.
Participation in this international program requires the creation of a national database of questions on the PISA assessment program and its integration into the curriculum. Assessing the quality of the learning process will lead to the introduction of tests and exams aimed at assessing the system of assessment of students, the formation of practical skills [6].

The fact that Uzbekistan is participating in the PISA assessment survey for the first time, in turn, makes it necessary for school teachers and students to systematically improve the content of this study, control and testing tools, which is an important factor in participating in the survey with high results. In organizing the PISA international assessment program, it is important to ensure that pedagogical graduates are ready for the assessment program when they come to work in general secondary education. It is also advisable to organize short-term professional development courses for teachers of science in the direction of the international assessment program PISA on the introduction of best practices of foreign countries. In turn, the PISA international assessment program requires systematic research, and this research is important in determining the direction of the education system.

Participation in international research on education quality assessment provides Uzbekistan with the following opportunities:

- The results of the research allow us to draw conclusions about the quality of education in the country and its role, taking into account international standards.
- It is used to reform the national education system, improve the content of education, training and retraining of teachers, as well as the creation of a new generation of textbooks by specialists.
- International research has a positive impact on the quality of national research in education.
- By participating in international research with the involvement of leading experts from various organizations in Uzbekistan will develop a culture of monitoring research among our local experts, leading to the compliance of education quality assessment with international standards.
- Allows the production of control materials in the assessment of the quality of national education at the level of quality of control materials used in international research [7].

In 2018, 78 countries (economies) are expected to participate in the PISA assessment survey, while in 2018, 78 countries (economies) are expected to participate. This, in turn, indicates the growing role and coverage of PISA assessment research in the world. Computer-based assessment studies will be conducted in 83 of the 88 countries participating. The seminars will also review the scope of surveys and questionnaires, organize the process of approbation of research assignments and form the necessary database, implement harmonization processes for surveys, adhere to technical standards of research, differences from previous research, changes, selection of schools and students (Sampling) processes, the organization of translations, the use of a special web portal for translations, the national research centers of the states activity of the questions and their personnel requirements, translation, adaptation and coding and other organizational issues.

In addition to assignments to assess students' core competencies, student surveys and school surveys are also organized. Within the framework of these seminars, the sample questionnaires will be adapted based on the national values of the participating countries. The PISA assessment survey will also be a great boost to research in education and will provide the opportunity to conduct surveys for a number of research papers in education using these questionnaires. Tasks that assess students’ core competencies will also be considered in detail by science expert groups in collaboration with participating States. The Education Testing Service and attached higher education institutions will be involved in this process. As an example, in the 2021 assessment study, the Luxembourg Center for Educational Testing (LICET) at the University of Luxembourg was attached. The research assignments for 2021 are ready by March 2019. Preparation, translation, approbation of research assignments is a complex process, which involves independent agencies of linguistic control, the Education Testing Service, research councils [8, p.9].

Separate seminars will also be organized for countries participating in the PISA assessment survey for the first time. In connection with the participation of the Republic of Uzbekistan in international research from 2021, the first seminar was held on January 14-16, 2019 in the United States. Uzbek experts took part in the international research seminar PISA 2021 in Austria. The State Inspectorate for Education Quality Control under the Cabinet of Ministers of the Republic of Uzbekistan, the Ministry of Public Education and its regional departments, the Republican Education Center and the National Center for International Research on Education Quality Assessment are responsible for PISA assessment research. In addition to PISA assessment research, the experience of a number of foreign countries is being studied in order to introduce PIRLS, TIMSS, TALIS assessment research. In particular, a number of practical works have been carried out with Kazakhstan and Russia. Responsible for the Uzbek assessment study were trained in various seminars with experts from these countries.

In cooperation with the World Bank and the Russian Training Center, a seminar-training on “International comparative research in the system of quality assessment of education as a mechanism for improving school education” was held on February 18-22, 2019 in Moscow. Development trends of

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| JIF         | 1.500         |
| SJIF (Morocco) | 5.667  |
| OAJJ (USA)  | 0.350         |
education quality assessment systems at different levels in the period of global change. Uzbekistan’s participation in international comparative research on education quality assessment, opportunities to increase the capacity of the education system, comprehensive analysis of international comparative research on education quality assessment, students’ reading, science, mathematics and positive thinking assessment, methodology of international research and assessment criteria from national teaching materials and measurement materials [9]. The use of strategic directions for assessing the quality of education is the most urgent tasks of the education system.

Improving the international competitiveness of education in Uzbekistan, the introduction of various educational technologies in the education system, new methods of teaching and learning, focusing on increasing students’ interest and motivation to learn are among the priorities of education. It is planned to build and reconstruct new schools in the regions, strengthen their material and technical base, support the development of social infrastructure in rural areas, as well as update educational standards. It is recommended to pay special attention and use educational standards from international best practices, including the requirements of international research.

It should be noted that the OIC has assigned the Australian Educational Research Council to assist in Uzbekistan’s participation in the PISA study, and the assistance includes: methodological and advisory assistance, PISA research support, surveys, capacity analysis, capacity building, development and project implementation plans, assistance in the development and implementation of national projects, support for national quality control and programs. The preparation and implementation period for participation in this research is 5 years, and in 5 years the following tasks will be implemented in stages: in 2018, test materials will be developed by international project partners, in 2019, adaptation of test materials will be carried out, analysis of readiness national assessments, PISA test assessments in 2020, and basic assessment studies in 2021. In 2022, the final results from 2018 will be announced and international and national reports will be prepared [10].

CONCLUSION

According to the PISA assessment survey schedule, the pilot phase is scheduled to take place in March-June 2020 over a period of 6 weeks or 42 calendar days, in which the National Center, in collaboration with international contractors, randomly selected a total of at least 1992 students from 71-72 out of 28 schools is obtained. The main research is scheduled to be conducted in 2021 on a computer-based basis for up to 8 weeks or 56 calendar days, in which PISA program will cover at least 6,300 students from 41 out of 130 schools on a random basis by international contractors. Starting in 2019, a rating system for evaluating the effectiveness of schools was introduced in the public education system. consists of assisting. In 2019, the activities of 10% (a total of 956) general secondary education institutions in the country were analyzed on the basis of 4 indicators and the results of their rankings were prepared as of July 1, 2019.

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