International Journal of Pedagogics
(ISSN – 2771-2281)
VOLUME 02 ISSUE 09 Pages: 05-09
SJIF IMPACT FACTOR (2021: 5. 705) (2022: 5. 705)
OCLC – 1121105677 METADATA IF – 5.689
Crossref doi Google Scholar METADATA INDEXING WorldCat MENDELEY
Publisher: Oscar Publishing Services

OSCAR PUBLISHING SERVICES

Journal Website: https://theusajournals.com/index.php/ijp

Research Article

TECHNOLOGIES OF PISA, PERLS, TIMSS, TALIS TESTS AND THEIR ANALYSIS IN THE INTERNATIONAL AND UZBEKISTAN EDUCATION SYSTEM

Submission Date: September 08, 2022, **Accepted Date:** September 15, 2022,
Published Date: September 24, 2022
Crossref doi: https://doi.org/10.37547/ijp/Volume02Issue09-02

Asadova Rukhsora Ergashovna
Termiz State Pedagogical Institute 2nd year master's student in pedagogy and psychology, Uzbekistan

ABSTRACT

In the development of socio-economic relations in the world, it is becoming increasingly clear that human intelligence and spirituality are an important factor and tool for developing society. This is the participation in PISA studies on the assessment of schoolchildren's knowledge in Uzbekistan. In 2022, the quality of education in Uzbekistan will be evaluated as part of the international PISA program. Galina Kovaleva, a Russian expert, shared her thoughts on how support is provided in preparing for the evaluation of the quality of education in Uzbekistan, the "below average" results obtained by the post-Soviet education systems, and what evaluation results can be expected.

KEYWORDS

International research types, PIRLS, TIMSS, PISA, TALIS, mathematical literacy, creative thinking.

INTRODUCTION

In the world, a number of scientific researches are being carried out to clarify the pedagogical and psychological features of developing healthy thinking in students of higher education institutions, to develop credit-module technologies for the professional development of future teachers based on innovative

International Journal of Pedagogics
(ISSN – 2771-2281)
VOLUME 02 ISSUE 09 Pages: 05-09
SJIF IMPACT FACTOR (2021: 5. 705) (2022: 5. 705)
OCLC – 1121105677 METADATA IF – 5.689
Crossref doi Google Scholar METADATA INDEXING WorldCat MENDELEY
Publisher: Oscar Publishing Services

approaches. You are familiar with the educational system of the CIS countries and their experience in international studies. In your opinion, in which areas of PISA can Uzbek students show good results.

Since this is the first time your country participates in these studies, there are no clear results yet and it is difficult to say anything. But I can give my guesses on this. I think math and science scores will be higher than reading literacy scores. The point is that PISA's reading literacy assessment tools have changed dramatically. In this regard, we saw that Russia's results also deteriorated slightly in 2018. Also, not only a new evaluation format (computer platform) was introduced to evaluate students' tests, but also completely different texts were offered to students: multidimensional texts, texts that needed to identify conflicts, point of view, or quality of sources. Therefore, we think that there may not be a big shift in the results of Uzbek schoolchildren in this direction. But we hope that in mathematics and natural sciences, your country, like Kazakhstan, Azerbaijan and Georgia, will show good results in the initial stages.

Resolution No. 997 of the Cabinet of Ministers of December 8, 2018 "On measures to organize international studies in the field of education quality assessment in the public education system" comprehensive support of research and innovation activities, first of all, creative ideas and creativity of the young generation.

The decision states the establishment of international studies (hereinafter referred to as international studies) under the following international evaluation programs:

Progress in International Reading and Literacy Study (PIRLS) - to assess the reading and comprehension level of primary 4th graders;

Trends in International Mathematics and Science Study (TIMSS) - to assess the level of mastery of mathematics and natural sciences of 4th and 8th grade students;

The Program for International Student Assessment (PISA) - to assess the level of literacy of 15-year-old students in reading, mathematics and natural sciences;

The Teaching and Learning International Survey (TALIS) - to study the teaching and learning environment and the working conditions of teachers in general secondary education institutions.

More than 50 countries are participating in the PIRLS study.

The purpose of this international research is different educational system is to identify and evaluate the readiness of primary school students in reading and comprehension of the text and the specific features of the educational system that cause students to achieve different achievements. Of course, such a study is for workers in the field of public education, scientists, methodologists, teachers, parents and the public

International monitoring of the quality of school mathematics and science education (English - TIMSS - Trends in Mathematics and Science Study) is a program organized by the International Association for the Evaluation of Educational Achievements (IEA). This study will help to compare the level and quality of mathematics and science knowledge of 4th graders and 8th graders in different countries and to identify differences in national education systems.

This survey is conducted once in 4 years. To date, it has been held for the 6th time. In 1995, 1999, 2003, 2007, 2011 and 2015.

3 times since 1995 (the last one in 2015), advanced research work (Advanced TIMSS) has been carried out,

International Journal of Pedagogics
(ISSN – 2771-2281)
VOLUME 02 ISSUE 09 Pages: 05-09
SJIF IMPACT FACTOR (2021: 5. 705) (2022: 5. 705)
OCLC – 1121105677 METADATA IF – 5.689
Publisher: Oscar Publishing Services

including determining the achievements of school graduates (11th grade in Russia, 12th grade in the USA).

The main task of the TIMSS international research is to provide a comparative assessment of the quality of school mathematics and natural sciences education. Every 4 years, the educational achievements of students of the 4th and 8th grades are evaluated, and at the same time, it allows to compare not only their knowledge and skills, but also their attitude to these subjects, their interest, and their motivation for education. The main design of the study: for 4 years, the results of the 4th grader's knowledge of mathematics and natural sciences will be monitored until he reaches the 8th grade. In this regard, the monitoring of the educational achievements of elementary and high school students is carried out.

Many scientific research centers and professional organizations of the world participate in conducting this research and developing the complex. Educational testing services: (ETS- Educational Testing Service SSHA), Statistics Canada, Secretariat of the International Association for Evaluation of Educational Achievement (IEA, Netherlands), Data center of the International Association for Evaluation of Educational Achievement (DPC IEA - Data ProcessingCenter IEA, Germany) etc. In order to strengthen the coordination of experts from different countries, advisory committees consisting of the world's leading experts were established. The current study is coordinated by the International Coordinating Center at Boston College. (ICC – International Study Center, Boston College SSHA)

In Russia, this study (the center for the assessment of the quality of education) is carried out by the Institute of Science, the Essence and Method of Education of the Russian Academy of Education, as well as the Ministry of Science and Education and the educational management bodies of the regions.

Currently, the development of the national innovation system and improvement of innovation potential is the most important for the economic growth of the country.

Therefore, the problems of researching these factors are relevant for many countries and international organizations of the world. In this regard, it is of great importance to have an evaluation system designed to quickly and reliably analyze the level of innovative development. International rating systems created by reputable international organizations are used as such rating systems. Among them, the Global Innovation Index used by the INSEAD business school, Cornell University and the World Intellectual Property Organization serves as the most popular rating system.

The Global Innovation Index (hereinafter GII) is recognized worldwide as the most important source of information on innovation activity and a useful control tool for decision-making bodies. This index is noteworthy for its application to both economically developed and emerging market economies, as well as a broad approach to innovation.

In 2022, Uzbekistan will participate in the Program for International Student Assessment (PISA). The Center for Evaluation of the Quality of Education of the Institute of Educational Development Strategies of the Russian Academy of Education is helping Uzbekistan to prepare for this international program.

Resolution No. 187 of the Cabinet of Ministers dated April 6, 2017 "On approval of state educational standards of general secondary and secondary special, vocational education" on measures" Decree No. PF-5538 [], "On measures to provide financial

International Journal of Pedagogics
(ISSN – 2771-2281)
VOLUME 02 ISSUE 09 Pages: 05-09
SJIF IMPACT FACTOR (2021: 5. 705) (2022: 5. 705)
OCLC – 1121105677 METADATA IF – 5.689
Crossref doi Google Scholar METADATA INDEXING WorldCat MENDELEY
Publisher: Oscar Publishing Services

independence to state higher education institutions" PQ-61 No. [] of December 24, 2021, "Development strategy of the new Uzbekistan for 2022-2026 on" No. PF-60 dated January 28, 2022 [], Cabinet of Ministers No. 997 of the President of the Republic of Uzbekistan dated December 8, 2018 "On measures to organize international research in the field of education quality assessment in the public education system Decree No. PF-5712 dated April 29, 2019 "On approval of the concept of development of the public education system of the Republic of Uzbekistan until 2030" , Resolution No. 434 of the Cabinet of Ministers of May 27, 2019 "On Approval of the Concept of Development of Environmental Education in the Republic of Uzbekistan", Decree of the President of the Republic of Uzbekistan of September 30, 2019 "On Measures to Radically Increase the Efficiency of Out-of-School Education in the Public Education System" PQ-Resolution No. 4467, Resolution No. 1059 of the Cabinet of Ministers dated December 31, 2019 "On approval of the concept of continuous spiritual education and measures for its implementation" , New version of the Republic of Uzbekistan dated September 23, 2020 "On Education " Law , Decree of the President of the Republic of Uzbekistan dated October 29, 2020 "On approval of the concept of development of science until 2030" No. PF-6097 , Decree of the President of the Republic of Uzbekistan dated November 6, 2020 "Education in the period of new development of Uzbekistan - on measures to develop the fields of education and science" PF-6108- This dissertation research serves to a certain extent in the implementation of Decree No. and similar regulatory legal documents.

Considered as a basis for an in-depth comparative analysis of the quality of education through the results of international studies: representativeness of samples, normal comparison groups and multidimensional scales; which meets the requirements of the objectivity of pedagogical measurements.

In the study, the set of dominant factors as an additional measure of educational achievements is theoretically based on the unconditional fulfillment of the basic requirements of the evaluation theory (biparadigm, representativeness, comparison, internalization, complexity, multidimensionality and interpretability).

The role of monitoring the quality of education as a tool contributing to the adequacy of the assessment of the effectiveness of educational systems in different countries is emphasized, the standards of organization and conduct of international research are considered; a scheme for identifying socio-pedagogical factors in PIRLS, TIMSS and PISA according to general approaches and a scheme of interaction of factors with an estimate of the proportion of explained variability is presented; stages of calculation of factors from the theoretical minimum model to the international real one with evaluation of factors and relationships between them and conversion of the international model into Russian data; Hierarchical and structured classification of factors at different levels of management (city, school) is given.

Based on theoretical analysis, a theoretical approach to factor analysis was developed using modern software tools: hierarchical, dynamic, systematic, multidimensional approaches, as well as hierarchical and systematic approaches to determining the interaction of factors.

In conclusion, it should be noted that if the biparadigm methodology is used in the comparative analysis of the results of countries in international research, it is possible to solve the above contradictions, in general;

International Journal of Pedagogics
(ISSN – 2771-2281)
VOLUME 02 ISSUE 09 Pages: 05-09
SJIF IMPACT FACTOR (2021: 5. 705) (2022: 5. 705)
OCLC – 1121105677 METADATA IF – 5.689
Publisher: Oscar Publishing Services

evaluation of local information based on the principles of evaluation theory; involvement of socio-pedagogical factors in the analysis of measurement factors within the generalized classification; ensure collection, verification and evaluation of statistical data within the framework of international standards; use of hierarchical, dynamic, systematic and multidimensional approaches in determining the set of dominant factors; is to provide impartial and reliable information about the quality of education, taking into account various factors.

REFERENCES

1. Mirolyubov A.A., Raxmanov I.V., Setlin V.S. Taxriri ostida. O‘rta maktabda chet tillar o‘qitishning umumiy metodikasi. – T.: O‘qituvchi. 2014.
2. Tursunov I.Y. Xalq pedagogikasing dolzarb muammolari. – T.: “O‘qituvchi”, 2010.
3. Oxford L.L. Language learning strategies: What Every Teacher should know. – N.Y. New Bury House Publishers 2010.
4. ies.ccsenet.org International Education Studies Vol. 11, No. 7; 2018, 178.
5. İngiliz Dili Bölümlerinde Uygulanışı (Yayımlanmamış Doktora Tezi). Atatürk Üniversitesi/Sosyal Bilimler.
6. Enstitüsü, Ġngiliz Dili Ve Edebiyatı Anabilim Dalı, Erzurum. Barın, M. (2002). Yabancı Dil Öğretiminde Dinleme Becerisin Önemi. Atatürk Üniversitesi Journal of Social Sciences, 2(28-29), 17-22.