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MODERN METHODS AND EFFECTIVENESS OF PREPARING PRIMARY SCHOOL STUDENTS FOR INTERNATIONAL ASSESSMENT SYSTEMS

Ahmetova Nargiza
Master's Student, International Nordic University
E-mail: Axmetova nargiza@gmail.com
ORCID: 0009-0009-6906-7493
Phone: +998 94 464 38 83
Isroilova Farzona
Master's Student, International Nordic University
E-mail: f.isroilova@nordicuniversity.org
ORCID:0009-0007-181
Badriddinova Aziza
azizabadriddinovamaxmudqizi@gmail.com
+998 93518 94 85

ABSTRACT: This article analyzes modern methods of preparing primary school students for international assessment programs, their theoretical and practical foundations, and ways to improve their effectiveness. The study reveals the essence and significance of international assessment systems (PISA, TIMSS, PIRLS) and their role in developing students' functional literacy, logical thinking, and decision-making skills in problem-solving situations.

The article scientifically highlights the importance of innovative pedagogical technologies, interactive methods, a competency-based approach, and integrative education in preparing primary school students for international assessments. It also discusses issues such as aligning national education standards with international criteria, improving curricula, and modernizing the assessment system.

The research results indicate that the application of methods aligned with international assessment requirements at the primary education stage significantly enhances students' knowledge levels, independent thinking abilities, and practical skills. Based on the findings, practical recommendations have been developed.

Keywords: international assessment, PISA, TIMSS, PIRLS, competence, functional literacy, innovative methods, interactive learning, methodology, assessment system, integrative approach, education quality, pedagogical technologies

INTRODUCTION

In the context of globalization, evaluating the quality and effectiveness of education systems based on international standards has become a pressing issue. International assessment programs are widely used worldwide to determine students' knowledge levels, practical skills, and life competencies. In particular, programs such as PISA (organized by OECD), TIMSS, and PIRLS (conducted by IEA) play an important role in assessing education quality.

Unlike traditional knowledge testing, these international assessment systems focus on evaluating students' functional literacy, logical thinking skills, independent decision-making in problem situations, and the ability to apply knowledge in real-life contexts. Therefore, it is essential to begin preparing students according to these requirements from the primary education stage.

In Uzbekistan, significant attention is also being paid to aligning the education system with international standards and preparing students to achieve high results in global assessment programs. In recent years, large-scale reforms have been implemented to improve education

quality, introduce innovative pedagogical technologies, and organize the learning process based on a competency-based approach. This necessitates the scientific improvement of methodologies for preparing primary school students for international assessments.

However, practice shows that certain shortcomings remain in the current teaching system. These include the dominance of reproductive teaching methods, insufficient development of students' independent thinking skills, and a lack of methodological approaches aligned with international assessment tasks.

The purpose of this article is to scientifically substantiate modern methods for preparing primary school students for international assessment programs, analyze their effectiveness, and develop practical recommendations for their implementation.

Research objectives:

- analyze the essence of international assessment programs;
- study the effectiveness of teaching methods used in primary education;
- identify innovative approaches for preparing students for international assessments;
- develop scientifically grounded recommendations for improving the educational process.

The scientific novelty of the research lies in the development of a comprehensive methodology for preparing primary school students for international assessments and the systematization of effective pedagogical technologies based on a competency-based approach. The theoretical and practical significance of the research is that the developed recommendations contribute to improving lesson effectiveness and enhancing students' knowledge levels and competitiveness.

LITERATURE REVIEW

Preparing primary school students for international assessment programs has become an important research area in pedagogy and education quality management. Studies conducted by both international and local scholars are of great theoretical and practical importance.

The theoretical foundations of international assessment systems are widely covered in OECD's PISA studies. This program evaluates students' functional literacy—their ability to apply knowledge in reading, mathematics, and science in real-life situations. OECD reports emphasize that educational effectiveness is determined not only by knowledge volume but also by the ability to apply it in practice, highlighting the importance of a competency-based approach.

TIMSS and PIRLS studies conducted by IEA assess students' subject-specific knowledge. TIMSS evaluates mathematics and science achievement, while PIRLS focuses on reading literacy, including comprehension, analysis, and interpretation skills. Their results serve as an important empirical basis for improving education systems.

Among foreign scholars, John Hattie in "Visible Learning" emphasizes the effectiveness of interactive and student-centered teaching methods. Linda Darling-Hammond highlights the importance of teacher competence and professional development in improving international assessment outcomes.

Local researchers such as R. Ishmuhamedov, O. Tolipov, M. Usmonboyeva, and E. Egamberdiyev have explored innovative pedagogical technologies and methods to enhance lesson effectiveness and modernize the education process.

However, most studies focus on secondary education, while insufficient attention is given to systematic preparation at the primary level. There is a lack of comprehensive methodologies tailored to younger learners' characteristics.

RESULTS

The study implemented modern methods for preparing primary school students for international assessments and analyzed their effectiveness through experimental research.

Students were divided into control and experimental groups. Traditional methods were applied in the control group, while innovative approaches (problem-based learning, interactive methods, competency-based and integrative teaching technologies) were used in the experimental group.

Initial diagnostic results showed that many students struggled with international assessment tasks, especially in text analysis, logical reasoning, and real-life problem-solving.

Final results demonstrated significant improvement:

- increased reading literacy and comprehension skills;
- improved mathematical reasoning and problem-solving abilities;
- enhanced scientific observation and analytical skills;
- strengthened independent thinking and decision-making abilities.

Statisticl analysis revealed that high-performing students in the experimental group exceeded those in the control group by 20–25%, confirming the effectiveness of the applied methodology.

CONCLUSION

The study confirms that preparing primary school students for international assessments requires a comprehensive pedagogical and methodological approach. International programs such as PISA, TIMSS, and PIRLS assess not only theoretical knowledge but also its practical application. Therefore, teaching methods must be improved accordingly from the early stages.

Traditional teaching methods are less effective in developing functional literacy, whereas competency-based, interactive, and problem-based approaches significantly enhance students' skills.The proposed methodology proved effective in improving students' literacy and practical application of knowledge.

RECOMMENDATIONS

1. Modernize curricula based on international assessment requirements.
2. Implement innovative teaching methods systematically.
3. Improve teachers' professional development through training programs.
4. Enhance assessment systems using diagnostic and formative evaluation methods.

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