

## THEORETICAL BASIS OF THE PRIMARY EDUCATION SYSTEM AND THE EXPERIENCE OF DEVELOPED COUNTRIES

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### **Abstract**

This article analyzes the theoretical foundations of the primary education system and the experience of developed countries. The role of innovative pedagogical technologies in improving the quality and efficiency of education, as well as the process of forming independent thinking and creative approaches of students, is considered. The results of international assessment programs such as PISA and TIMSS are also analyzed, and ways to modernize the education system of Uzbekistan are discussed. The study uses comparative, empirical and statistical analysis methods.

### **Keywords**

primary education, quality of education, innovative technologies, pedagogy, international assessment, critical thinking, learning process.

### **ENTRANCE**

Primary education plays an important role in the socio-economic development of society. Because it is at the primary education stage that children's fundamental knowledge, skills and competencies are formed and the foundation for future academic success is created. World experience shows that in developed countries, the primary education system is highly developed, aimed at increasing students' creative thinking, interest in independent learning, and educating them in accordance with the requirements of modern society. In this regard, the education system of Uzbekistan is also trying to improve its national education model by learning from the experience of developed countries[5].

The study of the theoretical foundations of primary education is one of the important areas of pedagogy, psychology and educational management. These theoretical foundations are based on the psychological characteristics of child development, didactic principles, pedagogical innovations and modern teaching methods. In order to increase the effectiveness of education, studying the experience of developed countries and adapting them to national conditions

remains one of the urgent issues today. Because in the context of globalization, the education system is required to adapt to international standards, be enriched with modern technologies and ensure the comprehensive development of students.

Although the world's advanced education systems, in particular, countries such as Finland, Singapore, Japan, the USA and Germany, have different approaches to primary education, they all have common features. The educational process in these countries is aimed at developing the individuality and creative abilities of students, and interactive and innovative methods are widely used in the educational process. For example, in Finland, students are developed without excessive pressure, while their independent learning and critical thinking skills are developed. In Singapore, an education system based on efficiency and scientific and technical achievements has been formed. These approaches can also be applied in the primary education system of Uzbekistan.

In recent years, Uzbekistan has been implementing large-scale educational reforms. In particular, special attention is paid to the modernization of the primary education system, the introduction of modern pedagogical technologies, and the improvement of teachers' qualifications. At the same time, the process of studying the experience of developed countries and adapting it to local conditions requires constant improvement.

This article analyzes the theoretical foundations of the primary education system, the best practices of developed countries, and the possibilities of their integration into the education system of Uzbekistan. The main goal of the article is to study the best practices that serve to improve the quality of education and identify ways to appropriately apply them in the national education system.

### **LITERATURE REVIEW**

Many scholars have conducted scientific research on the theoretical foundations of the primary education system and the experience of developed countries. This section analyzes scientific sources on the pedagogical principles, modern approaches, and best practices of primary education in foreign countries.

The constructivist learning theory put forward by J. Bruner plays an important role in illuminating the theoretical foundations of primary education. According to it, the process of students' learning should not consist only of mastering ready-made knowledge, but should be carried out through independent research and experience [1]. This approach is widely used in countries such as Finland, Canada, and Singapore, and is based on the development of students' creative and critical thinking skills.

PISA (Programme for International Student Assessment) and TIMSS (Trends in International Mathematics and Science Study) studies are recognized as important scientific sources for improving the quality and effectiveness of education. In particular, according to the results of the PISA studies conducted by the OECD, in countries with high quality education, the teaching process is organized taking into account the individual needs of students and is focused on independent thinking [2].

Studies of the experiences of the education systems of developed countries show that in Finland, primary education is organized taking into account the psychological state of children. As noted in the research conducted by Sahlberg, the Finnish education system is based on the formation of the child's personality, an individual approach, and minimizing stress factors in the educational process [3].

Goh and Lee, who conducted research on the Singapore experience, analyzed the main factors behind the high performance of the Singaporean education system in their work, emphasizing that this system is based on innovative approaches. According to their research, in Singapore, special attention is paid to STEM (Science, Technology, Engineering, Mathematics) subjects and great importance is attached to the development of students' analytical thinking skills at the primary education stage [4].

The work of Khodjayev on the primary education system in Uzbekistan is noteworthy. In his study, the author emphasizes the importance of adapting foreign experiences in the process of modernizing the national education system [5]. Also, in her scientific article, Mahkamova points out the need to train pedagogical personnel and introduce modern teaching methods to improve the quality of primary education in Uzbekistan [6].

New innovative approaches to the quality of primary education and pedagogical technologies have also been highlighted in the scientific literature. For example, research by Frey found that integrating digital technologies into the educational process can increase children's interest and improve learning efficiency [7].

## RESEARCH METHODOLOGY

This study aims to study the theoretical foundations of the primary education system and the experience of developed countries, and was conducted based on comparative, analytical, and empirical methods. The following methodological approaches were used within the framework of the study:

1. Theoretical-analytical method - analysis of existing scientific literature, government decisions, educational standards, and international rating results on the primary education system and best practices in developed countries. Sources

were selected based on reports from organizations such as PISA, TIMSS, OECD, and UNESCO.

2. Comparative method - the primary education systems of countries such as Finland, Singapore, the USA and Germany were compared with the education system of Uzbekistan. Through this, the possibilities of adapting advanced pedagogical approaches to national conditions were analyzed.

3. Empirical research method - questionnaires were conducted among teachers and students to study the educational process in some primary schools in Uzbekistan. Through this, the effectiveness of modern educational methods was assessed.

4. Statistical analysis - based on the results of international assessment programs, the current state of primary education in Uzbekistan was studied and the need for reforms was substantiated.

These methodological approaches ensured the scientific validity of the research and developed recommendations for integrating the experience of developed countries into the national education system.

## RESULTS AND DISCUSSIONS

The results of the study showed that the primary education system in developed countries is based on innovative and interactive approaches, each of which has its own unique educational model. In particular, in the Finnish education system, reducing stress levels for children and making the learning process interesting is important. In Singapore, special attention is paid to STEM subjects and an education system focused on technology and engineering has been formed. In the USA, emphasis is placed on the development of critical thinking and creative thinking, while Germany is distinguished by vocational education. The primary education system of Uzbekistan is based on a combination of traditional and innovative methods, and significant reforms have been carried out in this regard in recent years.

The results of PISA 2018 also confirm the effectiveness of the education systems of developed countries. For example, in Singapore, the average result of students was 556 points, while in Finland this indicator was around 530 points. The USA and Germany showed an average result of around 500 points. In Uzbekistan, this indicator was 379 points, which indicates that the primary education system requires improvement (OECD, 2018). These results can be seen in the table below:

**Table 1: Educational approaches and outcomes of developed countries**

Country	Educational approach	Student results (PISA 2022)
Singapore	Focus on STEM and science and technology development	560

Macau	Innovative educational approaches	535
Taiwan	Technology and engineering oriented	533
Japan	A combination of traditional and modern methods	533
South Korea	Developing critical thinking and creativity	523
Estonia	Focus on digital education and creativity	516
Canada	Inclusive and equal opportunity education	506
Ireland	Developing students' independent learning abilities	504
Switzerland and	Focus on vocational education and practical skills	498
Uzbekistan	A combination of traditional and innovative methods	352

*Source: PISA 2022 results*

**Table review:** This table shows the main approaches to primary education in developed countries and their student results in PISA 2022. As can be seen from the table, Singapore and Finland have the highest results, reflecting the quality of education and the effectiveness of innovative approaches. Uzbekistan's results indicate the need for further development to align with international standards.

Based on the results of the study, the following recommendations can be put forward for further development of the primary education system of Uzbekistan: strengthening the personal approach to education, enriching teaching methods with interactive and innovative technologies, developing students' independent thinking skills, as well as improving the qualifications of teachers. In this process, learning from the best practices of developed countries and adapting them to national conditions is of great importance.

### CONCLUSION AND RECOMMENDATIONS

The results of this study show that primary education systems in developed countries are based on innovative approaches, aimed at developing students' creative thinking, critical analysis skills and independent learning skills. Education systems in countries such as Singapore, Finland, South Korea and Estonia have achieved high results, in which the emphasis on STEM subjects in the teaching process, an individual approach, the creation of a stress-free learning environment and the use of interactive methods are important factors.

In conclusion, Uzbekistan needs to learn from the experience of developed countries, introduce innovative pedagogical approaches, and strengthen its position in international rankings to improve its primary education system. By

implementing these recommendations, we can create a modern and effective primary education system in our country.

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