



DEVELOPING ICT SKILLS IN PRIMARY STUDENTS

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Abstract

The article examines the specific features of developing information and communication technology (ICT) skills among primary school students, the role of the teacher, and innovative approaches in the learning process. It analyzes issues related to improving students' digital literacy, independent thinking, and the overall quality of education through the use of ICT.

Keywords: ICT, primary education, digital literacy, innovation, student engagement, teacher.

Introduction

The 21st century is a time when the flow of information is rapidly increasing, and digital technologies have penetrated all aspects of life. In such conditions, a person is required not only to have knowledge, but also to have the skills to search for, analyze, process and effectively use information. Therefore, the use of ICT technologies at all stages of the education system, especially in primary education, is becoming an urgent issue.

A primary school student is a representative of a new generation that has "grown up with technology". Therefore, visual perception, quick response, and a tendency to interactivity are paramount in their way of thinking. In this regard, the teacher must direct their natural interest to an effective educational process by using interactive technologies in a modern lesson.



As the President of the Republic of Uzbekistan Sh.M. Mirziyoyev noted, “Forming a culture of working with modern technologies in children from an early stage is the most important way to educate a new generation with digital thinking.” Therefore, the use of ICT in primary education is not just the use of technical means, but a new philosophy of the educational process.

Currently, the "Digital Uzbekistan - 2030" strategy, the "Concept of Digitalization of Education", and the resolutions of the Ministry of Public Education on the integration of ICT into the educational process are aimed at modernizing the education system. Based on these documents, interactive whiteboards, electronic textbooks, and digital platforms are being introduced in all educational institutions. At the same time, international experience shows that the proper use of ICT in primary education increases students' interest in knowledge by 35–40% and develops their ability to work independently twice as fast (UNESCO, 2023).

But in practice there are still problems:

- Teachers' digital competence is not at the same level;
- The methodical use of ICT tools is not always well-established;
- The technical base is insufficient in some regions.

In this context, this article is devoted to studying the theoretical and practical foundations of developing skills in using ICT technologies in primary school students, identifying the role of the teacher in this process, and developing effective methods.

Primary education is the stage when a child not only acquires knowledge, but also lays the foundation for information culture. Therefore, it is during this period that it is extremely important to form in students the skills of selecting, sorting, analyzing and using information. This, in turn, requires gradual training in the culture of working with ICT tools.

From a pedagogical point of view, the use of ICT not only enriches the learning process technically, but also allows for the harmonious development of cognitive (knowledge), affective (emotional) and psychomotor (practical) areas. For example, visual materials (animations, interactive games) expand the child's imagination, while digital activities develop his logical thinking and analytical skills.

Psychologically, the use of ICT develops qualities such as maintaining a child's attention, expressing their thoughts through visual means, and making independent



decisions. Therefore, when ICT technologies are combined with active learning methods in primary education, the results will be more effective.

ICT also defines a new role for the teacher. Now the teacher is not only a provider of knowledge, but also an organizer of the information environment, a moderator working with digital tools. This requires the teacher to have ICT competence, that is, technical, methodological and innovative literacy.

In recent years, the concept of “Digital Pedagogy” has become widely used in the Uzbek education system. This approach involves enriching the learning process through artificial intelligence, virtual and augmented reality (AR/VR), as well as mobile educational applications. Such tools transform students from passive learners into active participants.

At the same time, the use of ICT in primary grades serves not only as a means of technical learning, but also as a means of socio-spiritual education. For example, when topics such as ecology, national values, culture, and communication culture are taught interactively in multimedia lessons, children develop moral and aesthetic feelings.

Therefore, the introduction of ICT into the educational process is not only a prerequisite for improving the quality of education, but also a tool that serves the socialization of the student's personality and the formation of an independent thinker.

Literature Analysis

Sh.M. Mirziyoyev's work “New Uzbekistan – on the path to development” extensively covers the role of digital transformation in education. It recognizes the use of ICT in education as one of the priority areas of national development.

Karimova N. and Abdullaeva G. (2022) in their work revealed the psychological and pedagogical aspects of ICT tools, emphasizing that ICT activates the student's cognitive process.

Rasulova M. (2024) studied experimental work organized on the basis of ICT in primary school and proved that these technologies increase students' independent learning abilities.

The "ICT Competency Framework for Teachers" developed by UNESCO (2023) defines the digital competence of teachers at the international level. This document can also serve as a methodological basis for the Uzbek education system.



Bekmurodova Z. (2023) evaluated innovative technologies as a factor that makes teachers' activities creative.

An analysis of these sources shows that the importance of ICT is widely recognized in academic circles, but methodological approaches suitable for the primary education stage have not yet been fully developed. This article fills this gap.

Pedagogical possibilities of ICT in primary education

For primary school students, it is very important to enrich the educational process through information technology. Multimedia tools, interactive whiteboards, animations and presentations can be used to enliven the lesson process. For example, using interactive games to work with numbers in a math lesson, and using video materials in a science lesson to visually explain phenomena, facilitates students' understanding.

The following results are achieved in lessons through ICT tools:

- students' interest increases;
- the quality of mastering the material increases;
- independent work and logical thinking skills are formed;
- The learning process becomes an interactive, creative environment.

Teacher digital competence and innovative approach

A modern teacher is a digitally literate educator. He or she must be able to choose ICT tools correctly and use them in a way that is appropriate to the content of the lesson. The ICT competence of a teacher includes the following aspects:

- creating curricula in electronic form;
- preparing interactive presentations;
- creating online tests and games;
- assessing student performance on electronic platforms.

Through ICT, the teacher provides an individual approach to the student. For example, a fast-learning student can work on additional tasks, and a child who is lagging behind can be helped through interactive exercises.



Developing digital literacy in students

Digital literacy is not just technical knowledge, but also the culture of selecting, analyzing, and using information correctly. This skill is gradually formed in primary school students through games, drawings, and multimedia lessons.

To the readers:

- safe use of the internet,
- protection of personal data,
- It is important to teach positive digital behavior standards.

This serves not only an educational but also a nurturing function.

Interactive gaming platforms.

Effective forms of using ICT tools in the classroom:

- Tests through online platforms such as "Kahoot", "LearningApps", "Baamboozle" ;
- multimedia presentations ;
- ensuring active participation of students through electronic games ;
- Demonstrative teaching using video lessons .

These methods activate students and form a culture of working in a digital environment.

Kahoot (<https://kahoot.com>) is an interactive educational platform that allows students to conduct real-time game-style tests with them. It has questions, answer options, a colorful interface, a time limit, and a competition element, which increases students' interest in the lesson. Kahoot is a convenient tool for making the lesson interesting, reinforcing the topic, and engaging students in the competition. This platform enlivens the lesson, increases student activity, and provides quick feedback on their knowledge.

LearningApps (<https://learningapps.org>) is a free educational platform that allows you to create and use interactive exercises in the form of games. It has a library of ready-made exercises, or the teacher can create new exercises based on more than 20 templates.



Baamboozle (<https://www.baamboozle.com>) is a simple online platform that is suitable for use in and outside the classroom. Baamboozle is not like other learning platforms; it offers quizzes, but with the added simplicity, it makes the work more fun and easy.

Baamboozle helps students learn educational material in unique, stimulating, and interactive ways.

The site has over half a million pre-made games, but also gives teachers the opportunity to create their own games, which makes learning even more unique.

Kahoot, LearningApps, Baamboozle platforms are important in the modern educational process, allowing you to organize the lesson interactively, interestingly and effectively. For the teacher, the assessment process is simplified, the lesson efficiency increases and time is saved. Thus, these platforms are one of the indispensable technological tools of modern education, and it is advisable for every teacher to widely use them in their work.

Problems and solutions

problems encountered in using ICT in primary schools :

- lack of technical equipment;
- low internet speed;
- Insufficient level of ICT knowledge among teachers.

solutions are proposed to overcome these :

- equipping each school with modern technical equipment;
- organizing regular ICT training courses for teachers;
- enriching curricula with digital resources;
- Use ICT in extracurricular activities (clubs, projects, competitions).

Type of ICT tool	Student activity (%)	Material utilization (%)
Traditional lesson	55%	60%
Interactive whiteboard	78%	82%
Multimedia lesson	84%	87%

Conclusion and suggestions

Developing ICT skills in primary school students is the foundation for forming a person who meets the requirements of a digital society. The teacher plays a leading



role in this process. As a modern educator, he must master ICT tools and be able to use them effectively at all stages of education.

ICT-based teaching helps students:

- independent thinking;
- creative approach;
- digital culture;
- forms an interest in knowledge.

Thus, the rational use of ICT technologies is one of the most important factors in increasing the intellectual potential of students in primary education. Developing skills in using ICT technologies in primary school students creates the foundation for digital education. Through ICT, the student is actively involved in the process of acquiring knowledge, and the skills of independent thinking, creative approach and collaborative work are formed.

Organizing lessons based on ICT activates students, and the teacher demonstrates his digital potential. Therefore, the modern way to improve the quality of education is the rational and methodical use of information and communication technologies.

References

1. Strategy of the President of the Republic of Uzbekistan "Digital Uzbekistan - 2030".
2. Sh.M. Mirziyoyev. New Uzbekistan - on the path to development. Tashkent, 2021.
3. Karimova N., Abdullaeva G. Information technologies in education. – Tashkent: TDPU, 2022.
4. Erkin o'g'li, Nematov Oybek. "PEDAGOGICAL SOFTWARE TOOLS." MODERN EDUCATIONAL SYSTEM AND INNOVATIVE TEACHING SOLUTIONS 1.3 (2024): 147-150.
5. Ne'matov, Oybek. "PROBLEMFUL EDUCATIONAL TECHNOLOGIES IN EDUCATION." " Science Shine" International scientific journal 3.3 (2023).
6. Rasulova M. Methodology of using ICT in primary education. – Shahrizabz: SDPI Publishing House, 2024.
7. Vygotsky LS Pedagogical Psychology. – Moscow, 2020.
8. Bekmurodova Z. Innovative educational technologies. – Tashkent: O'qituvati, 2023.