

EDUCATION FOR THE DIGITAL GENERATION: TEACHING WITH THE HELP OF INTERACTIVE TECHNOLOGIES

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Abstract

This article highlights the advantages and problems of teaching representatives of the digital generation using interactive technologies in modern education. It is emphasized that the use of digital tools serves to develop students' motivation, independent thinking, and creative approach. It also analyzes the didactic and psychological foundations of the technological approach, along with practical experiences.

Keywords: digital generation, interactive technologies, teaching, digital competence, modern education, innovative methods.

Today, the rapid development of information and communication technologies is also having a strong impact on the education system. The digital generation is a group of students who have grown up with technology, who are able to quickly absorb and analyze new information. Their learning styles are significantly different from traditional methods. In such conditions, teaching using interactive technologies is becoming an important pedagogical tool.

Digital technologies have made a fundamental shift in the educational process, creating new opportunities for increasing the level of student learning and monitoring their development. These technologies have significantly increased the flexibility of teaching, freeing education from territorial and time constraints. In particular, through distance learning platforms - programs such as ZOOM, Microsoft Teams, Google Classroom, students have the opportunity to participate in classes from anywhere in the world. Teachers, using these platforms, have the opportunity to conduct lessons in real time, share presentations and educational materials, consolidate knowledge through questions and answers, and assess student performance online. Especially during the COVID-19 pandemic, these platforms have become an alternative form of traditional education and have served as an important tool in ensuring the continuity of the educational process. In addition, digital tools also play a major role in improving the quality of education. For example, interactive whiteboards, digital laboratory simulators, educational games, infographics, and other visual materials help to engage students in the lesson and explain complex concepts in a simple and interesting way. Especially in natural sciences - physics, chemistry, biology, etc., the ability to conduct laboratory experiments virtually through digital simulations serves to ensure safety and

develop practical skills. Such virtual experiments develop students' scientific thinking, understanding of causality and analysis of experimental results.

Also, with the help of virtual reality (VR) and augmented reality (AR) technologies, the educational process is becoming more lively, interactive and effective. VR technology allows students to virtually experience historical events, visually study geographical locations or directly witness complex scientific processes. For example, by experiencing scenes from the Roman Empire or World War II in history in VR, the student does not just remember the knowledge, but feels and understands it. AR technology, on the other hand, allows students to study the structure of the human body or plants in real space in 3D. Such technologies enhance students' perception and attention, and arouse their interest in science.

Digital libraries, electronic textbooks, and scientific databases are also an invaluable resource for meeting students' information needs. Now, instead of having to go to a traditional library and stand in line, students have the opportunity to find and read the books, articles, or scientific works they need in digital form at any time and anywhere. This encourages the organization of the educational process based on an individual approach and the process of independent learning by students. At the same time, access to international scientific resources is expanding, and students and researchers can use modern, reliable, and up-to-date information in their research.

In addition, representatives of the digital generation - generations "Z" and "Alpha" - perceive visual information faster, have skills in working with digital devices. Interactivity, visualization and fast communication are important for them. Therefore, the use of interactive technologies in the educational process is necessary.

Interactive technologies include the following tools:

- Multimedia and video lessons: visualizing educational material.
- Online tests and quizzes (Kahoot, Quizizz): real-time assessment of knowledge.
- Virtual classrooms and LMS platforms (Google Classroom, Moodle): distance learning opportunities.
- Interactive whiteboards and mobile applications: ensuring active participation of students in the lesson.

The advantages of an interactive approach to teaching are the following:

- Student participation in the lesson increases.
- Independent thinking and problem-solving skills develop.
- The learning process becomes more individual and flexible.
- Suitable for visual, auditory, kinesthetic learners.

Especially for representatives of the digital generation, these technologies serve to deepen the theoretical and practical aspects of education. Modern information and communication technologies make it easier to organize vocational education, promote innovative ideas, and

realize creative potential. This creates a favorable environment for students' personal development and research in areas that suit their interests.

It is also worth noting that the widespread introduction of digital technologies into the education system has not only made the educational process more convenient, but also has brought about important advantages such as improving the quality and efficiency of each stage of the educational process, ensuring an individual approach, and expanding the capabilities of students. In today's digital transformation, the impact of digital technologies on education in the following main areas is of particular importance:

1. Formation of an interactive learning environment. The interactive environment created using digital technologies significantly increases students' interest in the lesson. Unlike traditional educational tools, electronic textbooks, video lessons, online tests, animations, and 3D models allow students to imagine the subject being studied in a more realistic and understandable way. For example, by viewing the structure of the human body in biology or historical sites in history lessons virtually, students gain visual and lively knowledge. Technologies such as virtual reality (VR) and augmented reality (AR) create an immersive experience in education and help them master complex scientific concepts more easily.
2. Individual approach and customized learning strategy. Digital learning platforms allow for the formation of an approach that meets the needs of each student. Through online learning resources, flexible tests, and assessment systems based on algorithmic analysis, students have the opportunity to learn at their own time and at their own pace. Teachers, using digital monitoring tools, will have the opportunity to analyze the level of mastery of each student, identify weaknesses and provide the necessary support individually. This is an important factor in increasing the effectiveness of the lesson.
3. Increasing the efficiency of the educational process. Digital technologies serve to organize lessons with high efficiency. Distance learning opportunities eliminate problems associated with geographical, social or physical restrictions. With the help of online courses, video lectures and electronic forums, students can receive education without having to travel long distances to attend classes. This saves time and resources, and optimizes the educational process.
4. Wide methodological opportunities for teachers. Digital technologies allow teachers to organize the lesson process in a more interesting, active and unique way. Recording video lessons, preparing electronic presentations, creating interactive tests, exchanging ideas on virtual communication platforms, and constantly updating educational materials - all these are methods that a modern teacher uses through digital tools. This process increases the professional skills of teachers, strengthens interaction with students, and brings the lesson closer to the student.

5. The possibility of integration into the global educational space. Digital technologies are eliminating geographical restrictions and bringing education to a global level. Now students from anywhere in the world can attend courses at foreign universities, communicate directly with foreign teachers, and have access to international scientific resources. This not only expands the scope of knowledge, but also plays an important role in intercultural communication, language learning, critical thinking, and the development of analytical skills.
6. Improvement of the monitoring and evaluation system. Through digital technologies, the possibility of continuous monitoring, analysis, and evaluation of the educational process has become much easier.

For example, systems based on artificial intelligence quickly analyze test results, identify student weaknesses, and provide recommendations for improvement. Based on statistical analysis, the teacher can monitor the mastery indicators of the entire class and make decisions on the quality of education.

For the digital generation, education is not just a means of imparting knowledge, but also a powerful socio-cultural space that encourages them to think creatively, study scientific and technical issues, and exchange experiences in a virtual environment. With the help of interactive technologies, students can deeply analyze scientific topics, understand social and moral values, and also develop as individuals who meet the requirements of modern society. For example, through discussion forums organized on digital platforms, project-based learning methodologies, webinars, and online conferences, students share their views, expand their knowledge, and enhance their intellectual potential.

The introduction of digital technologies in education also brings a number of advantages. In particular, students are developing the skills to freely express their opinions, develop creativity, work in a team, and find innovative solutions to real-life problems. For example, through project-based work platforms (Trello, Miro, Canva), group online development, interactive tests and visual aids, students not only acquire knowledge, but also learn to apply it in practice.

All this serves to form representatives of the digital generation as active, independent, critical thinkers and individuals adapted to modern society. Therefore, one of the urgent tasks facing modern pedagogy is to thoroughly study digital technologies, teach them to use them effectively and form students as active participants in this regard.¹

In conclusion, teaching using interactive technologies is a pedagogical approach that meets the needs and interests of the digital generation. These methods not only activate the process of students' learning, but also play an important role in turning them into independent and

¹ Каюмов, А. А. (2023). Raqamli avlod vakillarini ta'limga jalb qilishning pedagogik aspektlari. – "Innovatsion ta'lim" jurnali, №2.

creative thinkers. Therefore, the modern education system should constantly enrich its teachers with digital competencies.

References

1. Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge. *Teachers College Record*, 108(6), 1017–1054.
2. Tohidi, H. & Jabbari, M. M. (2012). The effects of motivation in education. *Procedia - Social and Behavioral Sciences*, 31, 820–824.
3. Уринбоева, Н. (2021). Raqamli texnologiyalar asosida interfaol ta'limni tashkil etishning zamonaviy yondashuvlari. Toshkent: TDPU.
4. Yusupova, G. (2020). Interaktiv ta'lim metodlaridan samarali foydalanish yo'llari. O'zMU ilmiy axborotnomasi.
5. Каюмов, А. А. (2023). Raqamli avlod vakillarini ta'limga jalb qilishning pedagogik aspektlari. – “Innovatsion ta'lim” jurnali, №2.