ORGANIZATION AND DEVELOPMENT OF THE EDUCATIONAL PROCESS ON THE BASIS OF DIGITAL TECHNOLOGIES

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ABSTARCT

This article considers the current problems of organizing and developing the educational process on the basis of digital technologies. The article also discusses the factors that hinder the use of technologies in the educational process. As a conclusion of the experiment, we can say that the use of digital technologies in the classroom not only for high school students and students, but also for younger students has shown that the learning process can be significantly improved.

Keywords: Digital technologies, video lessons, interactive educational programs, online educational platforms, virtual education, educational and analytical systems, educational cluster.

TA'LIM JARAYONINI RAQAMLI TEXNOLOGIYALAR ASOSIDA TASHKIL QILISH VA RIVOJLANTIRISH

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ANNOTATSIYA

Ushbu maqolada bugungi kunda ta`lim jarayonini raqamli texnologiyalar asosida tashkil qilish va rivojlantirish muammolarini hal qilish haqida fikr yuritiladi. Shuningdek, maqolada ta`lim jarayonida texnologiyalarni qo`llashda to`siq bo`ladigan omillar haqida ham yoritib berilgan. Tajriba xulosasi sifatida shuni aytishimiz mumkinki, dars jarayonida raqamli texnologiyalarni nafaqat yuqori sinf o`quvchilari va talabalarda, qolaversa, kichik yoshdagi o`quvchilar uchun qo`llash ta`lim olish jarayonini sezirarli darajada yaxshilash mumkinligini o`z natijasida ko`rsatdi.

Kalit so'zlar: Raqamli texnologiyalari, video darslar, interaktiv ta'lim dasturlari, onlayn ta'lim platformalari, virtual ta'lim, o'quv-tahlil tizimlari, ta`lim klasteri.

ОРГАНИЗАЦИЯ И РАЗВИТИЕ ОБРАЗОВАТЕЛЬНОГО ПРОЦЕССА НА ОСНОВЕ ЦИФРОВЫХ ТЕХНОЛОГИЙ

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АННОТАЦИЯ
В данной статье мы думаем о решении проблем организации и развития образовательного процесса на основе цифровых технологий сегодня. Статья также проливает свет на факторы, препятствующие использованию технологий в образовательном процессе. Подводя итоги эксперимента, можно сказать, что использование цифровых технологий в ходе урока не только у старшеклассников и студентов, но и у младших школьников показало, что можно существенно улучшить учебный процесс.

Ключевые слова: Цифровые технологии, видеоуроки, интерактивные образовательные программы, образовательные онлайн-платформы, виртуальное образование, образовательно-аналитические системы, образовательный кластер.

INTRODUCTION

Digital technologies, i.e., IT (Information Technology), are a set of technologies that provide the ability to collect, store, analyze, modify, and distribute data through technical means such as computers, the internet, smartphones, tablets, programming languages, systems, and other interconnected devices. Digital technologies are used today in many fields, such as business, politics, culture, education, medicine, and others. Digital technologies are also widely used in education, as they facilitate the learning process, provide opportunities for students to create experiences, and multi-systematize the learning process.

In order to organize and develop the educational process in Uzbekistan based on digital technologies, on February 28, 2018, the President of the Republic of Uzbekistan Shavkat Mirziyoyev adopted Resolution No. PP-3544 "On Additional Measures to Develop the Education Sector." This resolution defines the following tasks for the development and modernization of the educational process based on digital technologies:

- Organization of the educational process based on digital technologies and training of advanced personnel in this field;
- Development of digital technologies and innovative methods in the field of education;
- Organization of educational programs in a digital format;
- Organization of private computer classes for schoolchildren;
- Preparation and distribution of educational materials in digital format;
- Introduction of interactive methods in the learning process;
- Development of a system for monitoring and evaluating the educational process. [1]

Furthermore, on November 14, 2018, the Decree of the President of the Republic of Uzbekistan No. PP-4010 "On Measures to Ensure the Development of Educational Clusters" established measures to ensure the development of educational clusters. In order to ensure the development of educational clusters, important issues such as the organization of their activities, the development of the educational process, the improvement of students' professional training, the effective use of innovative technologies, the facilitation of young people's interests, ensuring the conformity of education to international standards and the introduction of innovative methods in education are presented. [2]

MATERIALS AND RESEARCH METHODS

There are several ways to use digital technologies in education:

1.Interactive educational programs: Interactive educational programs allow students to choose their own areas of study and use appropriate teaching methods. These programs allow students to use animations, videos, audio, and other comments to explain the information, skills, and abilities they need.

2.Digital textbooks: Digital textbooks serve as a great assistant to help students in their learning process. Digital textbooks allow students to simplify information and use appropriate teaching methods.

3.Online learning platforms: Online learning platforms allow students to use learning methods that align with their skills in their learning process. These platforms allow students to provide online lessons, tests, assignments, and other educational materials.

4. Virtual learning: Virtual learning allows students to use learning methods that align with their skills in their learning process. Virtual education provides online lessons, interactive assignments, and other educational materials for students. We will introduce you to the results of our scientific research on this topic later.

5. The use of digital technologies in other areas of education: The use of digital technologies is also widely used in other areas of education, for example, allowing students to write their own educational materials, create their own work, and use suitable programs to store their own data.

The following methods can be used to organize and develop the educational process based on digital technologies in the context of an educational cluster:

Online Learning Management Systems (LMS): This software helps to organize and analyze curricula, tests, assignments, and other educational materials online. Popular LMSs like Moodle, Blackboard, and Canvas are also convenient to use in the context of an educational cluster. This helps to organize and analyze platforms, curricula, tests, assignments, and other educational materials online. Additional information about such LMS (Online Learning Management Systems) can be found in the works of Alkarov, E., & Khurramov, and B. "Trends in the Development of Online Learning Management Systems." (2021). [3]

2. Video lessons: Allows students to learn through online lessons or videos in the context of an educational cluster. This method makes it easier for students to read and explain the given topic.

3. Interactive learning: This methodology is an educational method that allows students to learn and master. In this method, students define their own specific educational areas and receive education in accordance with their own mastery.

4. Early Learning: This method helps students prepare learning materials before starting the learning process. This method enhances students' learning and facilitates the learning process.[4]

5. Educational and Analytical Systems: These systems help to analyze students' academic performance. Analysis of student learning levels also has a positive impact on the development of the educational process and the improvement of student learning. [5]

These methods help to organize and develop educational processes based on digital technologies. In the context of an educational cluster, combining these methods and exchanging educational materials increases students' learning opportunities. Such methods are convenient and effective for students and teachers as they help facilitate the learning process, improve the quality of education, and enhance the development of education.[6]

Numerous scientific studies have been conducted on this topic, and today there is still much experience in this field. The following scientific experiments were conducted on the organization and development of the educational process based on telephones:

1) **Using mobile applications in the learning process:** These scientific studies were conducted to determine how best to organize the learning process using mobile applications, develop lessons that meet the interests of students, and learn how to solve many other important issues.

2) **Interactive Lessons in the Educational Process:** These studies have identified the impact of using interactive lessons on the educational process. When using this method, students demonstrate their profession by adding a lesson to its appearance, answering questions.

3) **The effectiveness of teaching over the phone:** In these studies, the effectiveness of teaching over the phone was tested. The effectiveness of learning over the phone from outside areas, what is suitable for students, and what ways to optimize teaching methods are considered.

4) Students' quick and easy access to important information: These studies directly examined how students can quickly and easily access important information, including listening to lessons over the phone, viewing and uploading books using electronic libraries.

5) **The complexity of using telephones in the educational process:** These studies are dedicated to determining the complexity of using telephones in the educational process. The most complex problems in organizing the educational process over the phone have been identified, and methods for their solution have been found.

Therefore, scientific research opens up great opportunities for organizing and developing the educational process based on telephones, and there are many opportunities for accumulating experience in this field.

RESEARCH RESULTS AND ANALYSIS

We have tried several similar digital technologies in the educational process in educational centers. The reason we chose educational centers is that we did not have much difficulty using any technology, such as phones, in educational centers compared to general education schools. We, of course, conducted research for a certain period of time on a lesson plan consisting of a number of intellectual games and interesting methods, intended for both young children and older students, which were prepared in advance. Overall, we did not encounter significant difficulties in choosing digital technologies suitable for the age of the student for the

traditional learning process. However, we encountered some difficulties during the lesson with young children, as they did not yet have sufficient knowledge of devices such as computers, phones, and whiteboards. For this reason, it became known that it was a little too early for young children to conduct the learning process with digital technologies, especially phones. It is advisable to conduct lessons with young children using other technologies. However, conducting classes with digital technologies for high school students and older students will yield good results. We mainly focused on conducting classes using phones and whiteboards, as well as 3D VR boxes. The diagram below shows the results of our research on the organization and development of the educational process based on digital technologies in the context of an educational cluster in Tashkent.

In our research, we identified the following factors that hinder the organization and development of the educational process based on digital technologies:

Providing the necessary technologies for students: Ensure that students have access to the technologies they need to use in the digital learning environment. When creating an educational cluster, students and teachers must be provided with well-trained computers, internet connections, projectors, and other technological devices. This allows for the further improvement of students' acquired educational experience and the implementation of innovative methods by teachers.

2. Providing teachers with new pedagogical techniques: In the digital educational environment, teachers must know how to use new pedagogical techniques and digital educational tools. This allows them to change the way they engage and teach students.

3. Providing the necessary programs for students: In a digital learning environment, the necessary programs for students should be provided. This will help students improve their academic performance and evaluate the results of the learning process. To organize the digital learning process, appropriate programs should be provided for students and teachers. These programs will help further improve the learning experience gained by students. These materials can be videos, infographics, animations, and other programs that meet the interests of students.

4. Monitoring and Evaluation System: When creating an educational cluster, appropriate systems should be provided for evaluating and monitoring the learning process. These systems allow students to assess and identify the necessary changes for further improvement of their acquired learning experiences. [7]

These factors are necessary for the organization and development of the educational process based on digital technologies. In a digital educational environment, students and teachers play an important role in creating an environment that meets their needs and characteristics, for creation and development.

In the context of an educational cluster, it is necessary to create the aforementioned environment for organizing and developing the educational process based on digital technologies, as the environment created is crucial for any development to yield positive results. This environment allows for the organization and development of the educational process based on digital technologies in the context of an educational cluster.

Conclusion. To organize and develop the educational process based on digital technologies in the context of an educational cluster, it is necessary to create the following pedagogical conditions:

First, it is necessary to define educational goals before creating an educational cluster. These goals will help determine what kind of information and skills should be completed for learners. Secondly, the special requirements and characteristics of students in the educational cluster must be determined first. This allows students to provide relevant information and analyze their learning process. Teachers in the educational cluster also need to be ready to learn new pedagogical methods and implement them. The use of digital technologies and other innovative methods allows for further mastery of the learning process. Furthermore, it is necessary to study digital technologies and other innovative methods and apply them in the educational process. This will help provide learners with a learner-appropriate learning experience. Finally, it is necessary to assess and monitor the learning process in the education cluster.[8,9]

These pedagogical conditions contribute to the development of the educational process organized on the basis of digital technologies in the educational cluster and allow for the provision of students with appropriate acquired educational experience.

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