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THEORETICAL BASIS OF THE CONCEPT OF ELECTRONIC EDUCATION IN THE PROCESS OF DIGITAL EDUCATION

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Annotation
This article will focus on the content of e-education in the process of digitization, concepts and principles of digitization of education, the use of digital technologies in education, integration into the educational process and professional competencies. Therefore, this article discusses the stages of creating electronic information and educational resources and issues of organizing training based on them.

Keywords: Digital education, e-learning, ICT, technology, integration, digital generation, didactics, intellectual, electronic, online, virtual, teaching methods, multimedia.

Аннотация:
В данной статье речь пойдет о содержании электронного образования в процессе оцифровки, концепциях и принципах оцифровки образования, использовании цифровых технологий в образовании, интеграции в образовательный процесс и профессиональных компетенциях. Поэтому в данной статье рассмотрены этапы создания электронных информационно-образовательных ресурсов и вопросы организации обучения на их основе.

Ключевые слова: Цифровое образование, электронное обучение, ИКТ, технологии, интеграция, цифровое поколение, дидактика, интеллектуальная, электронная, онлайн, виртуальная, методика обучения, мультимедиа.

Introduction

Information technology is firmly entrenched in our lives, without which the education system is unimaginable. Simultaneously, educational technologies must keep pace with the times, and the modernization of education will inevitably lead to digitalization. Today, almost all educational institutions in Uzbekistan are equipped with modern computer technology connected to the Internet and have their own websites, implementing e-learning and communication tools that meet international standards. Also, all this, the development trends of distance education and

information-educational space lead to the development of the specificity of the higher education system, the independence and creative abilities of students [1].

According to British scientists, who are leaders in the introduction of information technology in the educational process, future education should have the following characteristics:

- The number of personal computers should cover all the needs of the educational process;
- Availability of wireless technologies and their connection to local networks;
- Internet access to information and educational space, including teaching materials for the higher education curriculum;
- Alternative information resources that students find independently;
- A set of equipment (digital TV, etc.) that allows access to training materials on various media and from any source;
- extensive use of presentation tools (projectors, etc.);
- Students with disabilities should receive the same education as their healthy peers.

This approach defines e-learning only as an adjunct to existing classical education, and they are put on the same level, interact with each other, work in a complex, and somewhere information education is a traditional unit. can completely replace the lim. For example, V.I.Zagvyazinsky [2] identified the following contradictions of traditional education:

-activity of the teacher, passivity of the student;
- Average curriculum;
- Lack of individual approach to each student;
- abstract-logical form of information presentation;
- relatively fixed time intervals, etc.

We highlight the most important features of e-learning:

- high student activity;
- independent and conscious study of sciences;
- Interactive interaction with the material studied in the learning process, as well as with society;
- large volumes of materials and options for its presentation;
-The information environment in which the student is preparing motivates and motivates him cognitively.

It is well known that the nature of presenting information in a specific way influences the formation of thinking and the mental development of an individual. Thus, until recently, the printed text was the main source of information, implying the factual abstraction of the presented material and its consistent presentation, which in turn

enabled human thinking in a similar sequential, hierarchical and linear context. Multimedia elements Photo, video, and digital communications have a unique structure and, unlike text, are governed by models of images, emotional perception, and recognition. This, in turn, directs thinking to the search for connections between concepts and objects, to the flexibility of understanding laws, aimed at shaping the creative potential realized in practice.

I.V.Robert [3] defines information technology as a type of hardware and software based on computer and microprocessor technology, which communicate each other through electronic exchange and perform a wide range of information operations. In this context, the information technology-based learning process falls into a unique electronic environment that is radically different from traditional education.

The psychological-pedagogical methodology of e-learning has a person-centered approach, in which the main focus is on the development of students' interactivity. E-learning environment tools include information and communication technologies that collect, transmit, share, produce, store and process information based on microelectronic technology, as well as the use of Internet resources [4,71] .

ICT tools include:

- Electronic computers (computers), their modifications and related devices;
- Information input and output devices;
- Information networks;
- Multimedia devices (text, graphics, audio, video);
- Archive sources;
-Convectors for digitization of multimedia data, as well as their inverse;
- artificial intelligence and everything connected with it;
- Computer graphics devices;
-Software products (operating systems, programming languages, application packages, etc.);
- The whole range of means of communication, including all types (communication cables, radio channels, etc.) and location levels (from closed network to the Internet);
- E-learning resources based on digital technologies.

Didactically, even the most perfect tool at the moment cannot solve all the tasks of learning. It must be acknowledged that each medium, whether electronic or traditional, plays a unique pedagogical role that interacts organically with its peers in the group. But while in the past the book has taken the lead among all textbooks, in the electronic environment this place rightly belongs to the content of e-learning.

E-learning content (ELC) is a multimedia information material placed in electronic form, used in the learning process by digital data processing devices, and is the basis of the e-learning environment.

ELCs are classified into different areas:

- At the place of use (Internet resources, offline training programs, materials for electronic boards, etc.);
- By purpose (textbooks, dictionaries, reference books, etc.);
- On the principle of implementation (trainings, presentations, multimedia, etc.);
- By structure (lectures, practical exercises, tests, simulators, etc.).

There are also materials that require curriculum content and teacher participation for students to work remotely independently. There are three types of ELC: text, textgraphic, and multimedia. The simplest, of course, are text-based ELCs, which are mostly e-learning resources and digital textbooks on paper.

BF Skinner cites five didactic principles of digital education:

1. The principle of interactivity is the constant communication between the student and the teacher through the computer.
2. The principle of pedagogical excellence is a test method of analyzing student knowledge.
3. Modular principle - the material is divided into parts.
4. The principle of feedback - misconceptions are corrected.
5. Motivational principle - successful mastering is encouraged.

Derived from the name of textual ELC, there are graphic pictures and drawings along with the text. These presentations may include galleries, protruding explanations, tips, and may not always follow the traditional sequence. Multimedia content is currently audio, video materials and animation. It is interactive and characterized by countless databases that can be consumed in any order. The format of using Multimedia ELC is diverse - from reference books to educational games. ELC has been the basis of e-learning since the middle of the last century, when large-scale production of personal computers began.

In conclusion, the digital learning strategy is to divide the learning process into certain stages, as a result of which the student receives information about the learning process. The teacher can directly adapt the learning process using the student's feedback, adapting it to the individual characteristics of each student and his or her individual learning pace. In this context, e-learning is seen as a comprehensive tool.

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