

POSSIBILITIES OF USING MODERN ELECTRONIC EDUCATIONAL RESOURCES IN THE EDUCATIONAL PROCESS

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Abstract. *The structure of electronic educational resources and the requirements for their creation, the possibilities of using modern electronic educational resources in the educational process are mentioned.*

Keywords: *electronic educational resources, multimedia, virtual laboratory, computer, digital competence, digital resource, electronic lecture texts.*

Electronic educational resources recognized as a relatively new didactic tool are one of the promising directions that provide interactivity in the modern education system. Today, the educational process cannot be imagined without e-learning resources. Such educational resources are considered as one of the main components of the educational process. The analysis of the literature shows that the use of electronic educational resources in the educational process is the implementation of innovative ideas in the pedagogical activities of teachers, the individualization and information of education, and the determination of an individual educational trajectory for each student. , allows introducing the principles of a competent approach to the educational process and increasing the activity of students.

The innovative potential of electronic educational resources, the versatility of their application helps to implement a wide range of tasks that are solved in the classroom, which allows the teacher to create an integrated author's educational resource based on them and open it brings. The opportunities of general education plays an important role in the formation of digital competences of future elementary school teachers.

At the same time, every future elementary school teacher uses a computer in training. Future elementary teachers can work with special programs and educational resources or create an educational product independently (creative work, text or multimedia essays, research in a modeling environment or virtual laboratory, projects).

Almost all types of e-learning resources can be used in the computer room. Connecting computers to the Internet increases the work opportunities of future elementary school teachers. Electronic learning resources can be used at all stages of education.

Modern e-learning resources are able to provide:

- supporting all stages of the educational process;
- obtaining information, practical training, certification or monitoring of educational achievements;
- changing the role of the teacher (supporting the educational process and coordinating it) and actively involving future elementary school teachers in the educational process;
- control of the pace of learning and a sense of responsibility for the result;
- transition of future elementary school teachers from passive perception of the presented information to active participation in the educational process;

- introduction of new forms and methods of teaching, including independent individual education.

Educational institutions can use electronic educational resources posted on official state educational portals and resources developed independently by the teacher. One of the important steps in creating e-learning resources is choosing a software product. At the same time, it is necessary to pay attention to the functionality of the selected program, whether the e-learning resources created with them are interesting and useful.

Working with digital data includes databases, primary data accounting registers and data accounting registers obtained as a result of developed analytical algorithms, a certain communication system of primary statistical data and data obtained as a result of analysis, requires the organization of systems. Monitoring of the integrity of databases, algorithms for collecting and presenting data, systems for setting and monitoring the performance of target indicators in operational and forecasting activities, and, of course, new types of resources that allow to perform these and other functions.

All this is especially important during the digital transformation of existing technologies and resources, as well as the creation of new digital solutions. For example, the digital expertise model is used to create management decision support systems.

Thus, we can say that digital resources, including the Digital Profile model, management decision support systems based on it, primarily depend on the structure of databases, the type of data collected and objects depends on the established relationship between. In accordance with the digitization trend, the displayed and used information should be digital.

Based on this, digital resources and technologies should work with existing digital data at various levels, including the collection of new data. Numerical values have been, and will continue to be, a measure of valuation around the world. In the education system, you can find many examples of the numerical equivalent of the success of prospective elementary teachers, such as a number from 2 to 5, or a percentage, or a score represented by a number or number.

Designing for accessibility is making sure that e-learning resources are accessible to everyone, including those with general disabilities and learners with special needs.

Designing for accessibility is an important part of eLearning design. The Equality Act 2010 makes it a legal requirement for websites to be accessible regardless of disability. But in addition to preventing discrimination, designing for accessibility increases overall usability, eliminates differences between web browsers, and improves search engines' ability to correctly index page content - improving search engine rankings.

Some key considerations in eLearning design are: › Structure and location; › Navigation; › Color; › Pictures; › Multimedia; › Text (abbreviations, abbreviations, font type, font size, language).

We will try to briefly describe below the interactive educational methods and their possibilities that were used in pedagogical experiments during our research work and ensured the achievement of efficiency.

"Briefing" educational method. "Briefing" can be described as a short press conference devoted to the discussion of an issue or question related to a process or event. The stages of carrying out this method in the educational process are as follows: 1. Presentation part. 2. Discussion process (based on questions and answers). The briefing method can be used in the analysis of training results. Also, as a certain form of practical games, it will be possible to organize briefings with the participants dedicated to the discussion of a current topic or problem. It also works well for presentations of mobile applications created by students or listeners.

The "Control Section" of electronic educational resources is directed directly to testing the knowledge of the audience. The practical nature of the department is determined by the fact that it directs students to independent work with scientific and educational literature, provides the opportunity for independent self-evaluation.

This section serves for self-monitoring, intermediate and final evaluation of trainees of training courses.

In addition, e-learning resources include reference and supporting materials, in particular, a glossary, a list of abbreviations, frequently asked questions and their answers when studying a learning module (science), electronic versions of important sources (literature), questionnaires, typical situations, solutions to problems and samples of creative works of listeners, chrestomatization, etc. can be included.

When providing additional information and supporting materials in electronic educational resources, it is necessary to pay attention to the following situation, they should not contradict the main information provided on electronic educational resources, and should not cause disputes.

Texts of electronic lectures - the relevant educational module, including the learning objectives, the main and additional educational literature recommended for use, a series of self-control questions, and basic terms and phrases related to the topic. In accordance with the curriculum, there are electronic publications that briefly cover the main content of all topics and provide an opportunity for students of advanced training courses to acquire new primary knowledge.

In electronic lectures, educational material is placed in the following sequence:

1. Subject.
2. Educational purpose of the lesson.
3. Basic concepts and expressions.
4. Basic questions (training plan).
5. Brief description of the educational material.
6. Control questions and assignments.
7. Independent work assignments.
8. List of literature recommended for use

Theoretical training of the educational process organized in electronic form is usually based on a text lecture. Therefore, the text lecture occupies a significant part of the electronic lecture texts. Usually, all materials included in the curriculum are created in text form, and then additional audio and video materials are developed. The presentation of the educational material in this form eliminates the shortcomings of traditional lectures, in particular, the need to copy and record the necessary parts, and the excessive time spent by the lecturer on repeating it over and over again. provides. In electronic lecture texts, the necessary concepts are provided through different colors, letter shapes and images. This ensures the emotional reception of information by the students of advanced training courses.

There are usually two types of audio materials included in the lecture texts:

In online mode (using information and communication technologies);

It is distributed in offline mode (formatted as a file in the form of audiocassettes, audiodiscs, audio library and through network technologies).

Lectures are listened to by listeners through the same convenient and compact audio devices.

Video materials are also distributed online and offline. The direct transmission of this type of material online means that it is almost no different from a traditional lecture. The fact that the pedagogue and the audience see and hear each other in real time eliminates the distance between them. Therefore, this technology is distinguished by the fact that it is organized on the basis of direct communication between the pedagogue and the audience.

In offline mode, video materials are distributed as recorded on videocassettes and discs. Such materials include lectures, popular scientific video materials related to the topic, and video footage covering the meeting with the leading specialists of the field. Such video materials can be freely used anywhere, anytime and repeatedly.

Animated lectures are delivered to the audience through interactive educational computer programs. Animated lectures are created using multimedia technology. Based on his psychological and physiological characteristics, each listener chooses his own trajectory, learning rate, and learning method in this type of lecture.

Multimedia electronic educational resources are created on the basis of a pedagogical script that is purpose-oriented, designed for the development of the individual, and has methodological consistency of pedagogical methods and technologies to achieve the educational goal. This type of electronic educational resources should be developed on the basis of textual material, plot frames, general structural and organizational schemes, illustrated graphics, animations, video plots that match the pedagogical scenario.

When creating e-learning resources, it is necessary to divide the sketches of scripts and pictures into frames as much as possible. Therefore, at the final stage, the script is transferred to a programming language, that is, a computer program, in a sequence that the computer can understand.

Educational resources in electronic form must meet the modern requirements of the development of information and communication technologies. In the development of these resources, it is necessary to introduce the experiences of the most advanced countries of the world in this field, to effectively use the latest software products and technologies used by them. E-learning resources should be able to run on personal computers, local networks, and online over the Internet, and should not be burdensome to load.

Users of this type of information and educational resources are mainly pedagogues, listeners and students. For this reason, there should be no such thing as using different passwords and setting registration conditions when starting them.

It should not be required to install redundant programs that slow down the use of e-learning resources. Also, e-learning resources should be based on web technology. This approach makes it possible to use e-learning resources on different platforms.

One of the main conditions is that the electronic information-educational resource should be able to be easily integrated into the organization's server as a web page. E-learning resources must have 3 types: autonomous, local and Internet installation options.

Thus, the structure of electronic educational resources and taking into account the requirements for their creation ensures the quality of the created product.

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