



**POSSIBILITIES OF VISUAL ELECTRONIC EDUCATIONAL
PUBLICATIONS IN THE FORMATION OF PROFESSIONAL
QUALIFICATIONS OF BACHELORS IN THE FIELD OF SERVICE**

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ABSTRACT

Of great importance is the electronic presentation, which reflects the recent achievements of the main activities of digital education, the collection of large volumes of digital data, the production of Science, Technology, Engineering. During the study, we noted that many teachers used inappropriate information presented on the screen using pedagogical electronic products.

KEYWORDS

E-learning publication, visualization graph visualization method, didactic feature, e-learning publication development tamoils, etc.

Introduction

The main activities of digital education consist in the collection, collection, processing and storage of large amounts of digital data. The provision and implementation of relevant e-learning information in mutual cooperation in the network should be carried out at the highest level.

The results of various (educational, scientific and other) digital activities carried out by students in the information and educational environment are based on the integration processes that take place in a digital society. These processes initiate the dynamic development of Science and production, intellectualize Educational, Labor and scientific activities, increase the level of Information Service open to all members of society.

Of great importance is the electronic presentation, which reflects the latest achievements of Science, Technology, Engineering Production.

In this regard, the formation of professional qualifications of Service bachelors implies the filling of the educational process at the institution of higher education with electronic educational publications, as well as pedagogical products presented in the form of audiovisual technologies.

A number of authors have developed and substantiated the terms for the design of safe and expedient electronic publications used in education. In their opinion, the consequences of psychological and pedagogical influences with digital technologies, emotionally saturated and filled with information, are especially negative⁴⁷.

We will consider the capabilities of e-learning publications as a programmatic implementation of didactic capabilities of information and communication technologies at all stages of the educational

process, starting with the formation of cognitive tasks, the design of content, the generalization of their knowledge on their basis, the implementation of the educational project, the planning of further stages of educational activity, the construction. In addition, e-learning resources ensure the completeness and continuity of the process of formation of professional qualifications of Service bachelors, who must be ready to provide theoretical material through electronic educational publications with a qualitative supply, to carry out their training activities, as well as to use mathematical and imitation modeling with computer visualization elements.

During the study, we noted that many teachers used inappropriate information presented on the screen using pedagogical electronic products. These are:

educational information that exhausts students due to the excessive capacity of information and the emotional richness of the moment;

educational information that does not correspond to the individual characteristics of students in terms of its structure and quality;

full-level study data that does not provide a positive psychological background of student interaction with virtual reality objects;

the general inconsistency of the visual environment, color and sound background with the requirements for electronic educational publications.

In the modern educational process, the number of quality electronic publications is growing rapidly and accounts for more than 40% of all educational and methodological developments.

Currently, there are not many such electronic publications, since the didactic possibilities of applicants for this name are very limited. In addition, in our study, we note that many higher education institutions are not provided with modern technical means, which makes it difficult to use electronic publications in the educational process.

All electronic publications used in the educational process must undergo an appropriate multifunctional examination in order to eliminate the negative consequences of the use of EO.

Let's consider the following main positions of expertise::

implementation of didactic capabilities of the use of information technology in the sphere of pedagogical feasibility;

compatibility of educational content taking into account the age characteristics of students;

the educational and methodological feasibility of electronic publications, as well as the justification of the methodological foundations of the component of the electronic educational manual; ensuring the necessary Organization of training of students, the use of interactive methods and forms in the educational process, ensuring the appropriate pedagogical monitoring of the quality of mastering the educational material by students;

the necessary sanitary and hygienic and ergonomic conditions are created for the placement of educational information, the correctly provided visual and color background of the information field, clarity, logic and visual reading of the screenshot, correctly developed text format, character characteristics, sound parameters, artistic image parameters, multimedia, hypertext, technological features of hypermedia;

changing educational opportunities using electronic publications;

the process of installation and deletion, compliance with the technical characteristics of the reliability of the operation of electronic publications.

From the above, the need to develop completely different levels of electronic publications, which are effectively used in the preparation of Service bachelors using graphic visualization methods and 3D-technologies, was determined, on the basis of which the educational activity was not formalized in the process, including using interactive models of studied objects or processes, visual design programs in HTML, which allow solving creative issues in modeling certain components of activities of an informational-technological nature, allowing interactive communication through language forms that accccre natural for a person ,programs for the development of 2D and 3D graphics (Adobe PhotoShop, Adobe Illustrator, etc.), programs for obtaining animated constructs (3ds Max, With software-based tools such as Adobe Flash, etc.), it will be possible to achieve an imitation of students solving issues of high complexity 48. All of the above makes it possible to determine the main prospects for the development of electronic publications and their use as a didactic tool of relevant information training of Service bachelors.

The development of electronic publications requires: 1. Improving the legislative framework, which allows you to assess the quality of electronic publications, as well as create a basic framework for protecting the intellectual property and information security of the user. 2. Modeling digital activities in the study of objects or processes through interactive communication. 3. Design an electronic publication in accordance with the instructive-methodological base used in the information and educational environment of the higher education institution. 4. The presence of non-formalized creative tasks. 5. Training of scientific and pedagogical personnel in the field of examination of electronic publications. 6. Introduction of a system of methodological support for the use of electronic publications in additional educational programs, a system of examination of the educational process of secondary and general educational institutions and the quality of electronic publications. 7. Improvement of information competence in the field of application of information and communication technologies in professional activities (for science teachers). 8. Increase the level of development of information and communication technologies (for students). The development of the structure of e-learning publications requires separate approaches, to which we will dwell. Hypertext technology used in e-learning publications requires teachers and programmers to address the following key issues.

First, the first electronic product that we develop is a textbook, a teaching manual, a chrestomy, a reference, a dictionary, an encyclopedia, assignments, lectures, etc. Secondly, the e-learning Edition must have been developed and tested by the author on a conceptual basis, and only then will it have a teaching significance. This applies to the internal structure of the hypertext system.

In addition to the internal structure, the basic principles that apply to conceptual design and include a visualization structure that defines the links between the individual elements of the course remain relevant49.

In this case, students will have the opportunity to use a special navigation map or module pointer in the content. Within the framework of research activities, it is possible to use a special technique, that is, to hide the entire structure of the science from students, in which case the student must complete the task by developing a structure based on his accumulated knowledge or instructions.

It will be a R & D system for design design, that is, the organization of conditions by the author that determine the capabilities of the information system and the possibility of building his own individual research trayetory based on his educational interests. At the same time, it is a problem that is difficult to determine the universal structure of the transmission of educational information in various fields of science.

Now we actualize the problem of the influence of various plan factors on the development and presentation of a system of educational information in a hypertext electronic publication. In this case, as educational practice shows, a large part of the requirements for electronic textbooks are to some extent opposite, mutually exclusive and difficult to match.

One of the factors is the field of science. In our study of General Technical Sciences, the presentation of information is fundamentally different from the humanities, which work in much larger textual volumes, characterized by a low level of formalization, universal conceptual definitions and the absence of solving problematic and other issues.

Studying such subjects as “theoretical mechanics”, “machine parts”, “engineering graphics”, “computer graphics”, “Multimedia technologies”, “Auto Service” and others using electronic educational publications, i.e. multimedia technologies requires visual display of objects on the computer screen. Therefore, when developing these electronic publications, a variety of demonstration materials should be included along with the main text.

Comparison of electronic textbooks with printed editions involves actualization of the value of the pictorial material presented in the text. “Clean” texts without such material will only have information about texts and will be used only with the help of texts. Subject indicators should be mandatory included in the composition of electronic textbooks, which give students the opportunity to start with the conceptual and meaningful foundations of the educational publication when working with educational information. This creates the conditions for students to quickly search for relevant educational information and make a comparative analysis of a certain number of electronic textbook articles, taking into account the same concept.

When developing electronic publications of a humanitarian orientation, it is advisable to include in their composition various schemes, photographs, tables for various purposes, high-quality presentations (for example, for the “Persons” Section).

The development of electronic publications on foreign languages requires the active use of multimedia technologies, since they undoubtedly have educational advantages.

The design of the structure of multilevel non-linear information systems should begin with the development of a holistic system of first high-level nodes, and then the expansion of additional nodes of other quality levels.

The solution of EON educational problems in the physical profile is carried out using special tasks, various forms of pedagogical control in the conditions of laboratory and practical training. At the same time, training tasks can be classified as calculating and qualitative. In the specified plan, structural communications provide free access to all information subsystems and determine the construction of the necessary hierarchy of nodes, the content of which is expressed in one or another theoretical, practical and test material.

Structural communications fall into three categories:

1. Connecting links, which are used by users to obtain detailed training information, which is located on various information nodes and provides clarification on specific training issues.
2. Clarifying links that provide the correct semantic relationship between the text structure of an electronic textbook and the images, videos and other software corresponding to this text.
3. Associative relations. Such connections allow the use of compact information that occurs together in an informational nature. The study of the “engineering graph” course of study involves drawing up the described material in separate modules. In the practical implementation of the formation of the

structure of the hypertext learning system, it will be necessary to prepare the content on a modular basis through qualimetric provision.

In such electronic textbooks, associative links are directed to the article "persons", which creates the necessary conditions for students to receive meaningful information about short biographical information when mastering educational material.

At this stage of the practical construction of the hypertext learning system, the following didactic measures should be taken:

formation of individual self-sufficient educational information modules by differentiating and detailing the overall structural area of the curriculum;

development of reference works of various functional objectives necessary to ensure the systematic integrity of associative links;

to develop a list of additional materials of auxiliary importance. Such materials can be, first of all, a variety of images, videos and other materials necessary for the detailed description of informational clarifying communications;

development of a system of thematic cards reflecting the general information structure of each training module. Each such card should contain a detailed list of contacts and links for all the didactic materials above.

The development of the course in hypertext decoration requires a meaningful filling of all updated components. This is reflected in the preparation of detailed lecture sessions and the correct adaptation of students to the possibilities of their effective perception in electronic form. In addition, the development of the course requires different examples, the choice of test assignments of different levels of complexity, etc.

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