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Use of computer teaching systems in the learning process

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***Abstract* – Just a few decades ago, books were mostly used as educational media, while posters, various mechanical models, etc. were used as educational visual illustrations. Laboratory experiments for teaching chemistry, physics, biology, etc. were conducted in schools and colleges using real materials. Today the situation is drastically changed and all this has been forgotten. Modern computer teaching technologies are being rapidly introduced in the educational space replacing old tehcnology with hypertexts, e-books and textbooks, tutorials and many other forms and contents.**

***Keywords* – computer teaching systems; learning process; computer technology.**

I. INTRODUCTION

One of the main directions of the process of informatization of modern society is the informatization of education. Informatization of education, of course, implies the introduction of new information technologies and technical means in the education system. Education informatization provides and enables:

- Improving the management of the education system on the basis of the use of scientific-pedagogical information, teaching-methodical information materials and communication network database automation;
- Improving the relevant tasks for the development of teaching methodology choice and process management strategy in the system, teaching methods and organizational forms, the listener's personality in the modern conditions of public informatization;
- Creation of modern, innovative methodological teaching systems, which is focused on the development of the listener's intellectual potential, the formation of the ability to acquire knowledge individually (independently), the implementation of information-learning, experimental-research activities, various types of independent information processing activities.

II. MAIN PART

Although computer technology is actively used in the teaching process today, we must always remember that it is only a modern teaching aid. Just as the teacher was a leading figure in the traditional learning process, the teacher still maintains leadership in classes or classrooms equipped with modern computer technology. Moreover, the teacher today appears as the creator of innovative pedagogical technologies and therefore he is not only a teacher, but also a teacher-technologist.

In the traditional teaching process, the teacher is the main source of information in the student / pupil relationship. An important feature in this process is the presence of feedback, which is more or less successfully implemented. We see a completely different picture when using computer technology in the learning process. The main feature that distinguishes this process from the traditional one is the availability to organize an effective dialogue between a person and a computer through interactive programs.

Clearly, e-books have many advantages over traditional textbooks that are reflected in the learning process. However, it also has its downsides, which must be identified and avoided. One of the positive aspects is that the electronic text book, as an emotional tool, has a positive effect on the user's mind, is easily perceived and helps to activate a memorable function. For example, any study topic in a traditional textbook may require a large textual explanation (sometimes even impossible) and still be difficult to comprehend, while for an e-textbook this process is very simple to imagine.

The use of computer teaching systems provides access to primary information through interactive learning programs, which significantly helps students, if properly competent, to master this or that subject or any topic of this subject.

With information unlimited in time and space, the student can independently consult using different sources of information; Constantly performing self-control in different forms, which significantly increases the motivation for cognitive activities and the creative nature of learning.

The types of e-training are determined depending on the task of designing e-learning and the purpose of teaching.

E-training can be of the following types:

- subject-oriented;
- Class-oriented;
- Focused on each topic of the subject;
- Skill development oriented;
- Focus on technology studies, etc.

The learning environment, which will maximize the student's independent cognitive activity and expression of creative skills, depends on the quality of the use of modern computer teaching systems in the learning process.

The flexibility of computer teaching systems and knowledge of their application skills is one of the most perspective ways to increase the effectiveness of learning. The use of modern computer teaching systems in learning processes should not be limited to accelerating the process, but should also be aimed at a deeper understanding of the topics and events to be studied.

The task solving method for each new exercise in computer training should be based on strict logic and include the following steps:

1. Discuss several tasks of one type and purpose;
2. Develop a specific algorithm for solving each task;
3. Analysis of the results of the obtained solution.

The main place in the given methodology should be to compile an algorithm, which is a sequence of precisely formulated rules for solving a specific type of task. Obviously, this algorithm is nothing more than a plan for solving a task. As a result of mastering different types of tasks, it is necessary for students to be able to compile a generalized algorithm and an appropriate program in an interactive mode, using computer tutorials.

We need to focus on the specific feature of a particular task, which is an important methodological problem. When creating a computer assignment, it is necessary to take into account the intellectual abilities of the student. Therefore, software product creation methods should be geared towards a simple execution process, including user instructions.

In the process of training a specialist, training on computer training and analysis of targeted experiments allows the specialist to develop reflexive skills to understand and orient in a difficult situation. In addition, on computer training we can visually demonstrate the physical essence and nature of the processes going on at the facility or equipment; their relationship to each other and a number of such important details, which, unfortunately, are not always given proper importance in practice and which can pose a significant threat to the facility management process.

CONCLUSION

Computer training can be of great help in analyzing the expected accidents of technical equipment and planning appropriate preventive measures to avoid adverse events caused by the accident. Clearly, this can be achieved by reproducing facility or maintenance management statistics and artificially created emergency and contingency simulations on computer trainings. All this should be done in the process of training specialists in higher education, which should be reinforced by the curriculum. Curricula should include the use of e-training in the learning process in the form of visuals, which will model the ongoing technological processes at the facility, which belongs to the field of activity of the future specialist.

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