INCREASING THE CREATIVE ACTIVITY OF FUTURE TEACHERS USING ELECTRONIC SOFTWARE EDUCATION TOOLS

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Abstract: This article presents the importance of using electronic software learning tools in higher education teaching processes. Ways of using software educational tools in educational processes of higher education institutions are highlighted. It is mentioned about increasing the creative activity of students based on electronic software training tools.

Key words: pedagogical software tools, distance learning tools, virtual laboratories, electronic textbooks, electronic training manuals.

The need for science and technology in the fields of education in our republic is increasing day by day. In order to eliminate such problems, the formation of modern technological knowledge, the improvement of higher education processes on the basis of electronic software tools, and the implementation of such tasks as increasing the professional and creative activity of students on this basis are gaining importance. Sh.S.Sharipov's research revealed scientific, pedagogical-psychological, organizational conditions for the formation of creativity of future teachers of labor and vocational education. The content of new information technology, which includes automated educational and information systems and a knowledge bank, which serves to increase the efficiency of mental labor activity and developed creativity, has been developed.

The analysis of the research works shows that information technology education training courses also increases the creative productivity of students. Among software educational tools, computer technology is a didactic tool designed for partial or complete automation of the educational process. They are considered one of the promising forms of increasing the effectiveness of the educational process and are used as teaching tools of modern technologies. Pedagogical software training tools are created using programs that implement effects such as dynamic illustrations, sound processes, animations. The advantage of these tools: the future technology teacher will develop professional skills and gain new ideas by watching the work processes with sound effects, certain movements.

In addition, there are programs that create a virtual learning environment with the participation of the teacher, and with the transition to distance learning, all educational materials, questions and answers between the student and the teacher, the results of teaching, and all such communications are not only for the student or audience, but also educational material, technology, and content. is fully permitted on the Internet for anyone interested in. This will serve to promote virtual education and prevent many teachers from moving too quickly to distance learning technology [1].

Distance education tools - traditional and innovative educational tools based on the use of computer equipment and telecommunication tools and other new information technologies are used in the process of distance education. This is called "software and technical means of education" in the language of modern education. It is necessary to implement the software and technical tools for conducting distance education in the areas of technological education to solve the following pedagogical tasks.

– the possibility of independent study and passing computer tests;

– to provide favorable conditions for delivery of educational material;

– working with students and carrying out interaction on the basis of collective communication.

In distance education, the student and the teacher are in constant communication with the help of specially created training courses, control forms, electronic communication and other technologies of the Internet, while being separated from each other. Prospective directions in the use of software educational tools in the subjects of general professional training are as follows: creation of a generalized information model of the entire class of technical objects; creation of educational simulators and simulation models, including virtual laboratories. It is also important to present the theoretical foundations of various and complex technical devices and systems in a convenient and understandable way when using software training tools. It is known from the experiments that a person can remember the information received with the help of the organs of vision 5 times stronger than the organs of hearing. Unlike hearing organs, information received from vision organs is not recoded, it goes directly to memory and is stored for a long time. Therefore, another effective teaching tool is electronic textbooks and electronic study guides.

Electronic study guide - partially or fully covers the study volume of the subject and includes an adaptation block of information, designed for distance learning and independent learning.

E-textbook - compared to traditional textbooks, it creates more opportunities to display educational materials [2].

In addition to performing didactic functions designed for more independent and creative work of students, the electronic textbook should meet all the requirements for the educational process. Therefore, in the application of electronic textbooks to the educational process, taking into account their psychological and hygienic aspects, in addition to their pedagogical aspects, ensures the intellectual abilities of future technology teachers and their active participation in this process. An electronic textbook is an educational literature based on the application of the computer-based learning method and comprehensively effective mastering of the educational material of the subject, and can be applied to one of four levels.

Level 1: an electronic textbook that presents educational material only in verbal (text) form;

Level 2: an electronic textbook that presents educational material in verbal (text) and graphic (picture) form;

Level 3: multimedia textbook, that is, a multimedia electronic textbook in which information is presented in three-dimensional graphic form, sound, video, animation, and partially verbal (text);

Level 4: e-textbook that allows the learner to enter the real world depicted in a stereo copy of the "screen world" and create a vision of movement in relation to the objects in it. [3].

Electronic textbooks of all categories increase the efficiency of the educational process and create great opportunities for independent learning of students and organization of distance learning.

Depending on the goals of education, the electronic textbook can have the following forms:

– electronic textbook for science;

– for teaching individual subjects from the computer classroom;

– electronic textbooks designed for studying individual sections of a subject during open study of educational material;

– electronic simulators, virtual stands, multimedia for science, along with educational material with information;

– electronic automated systems of development of creative abilities.

In conclusion, it can be said that electronic software tools provide a wide range of opportunities for future professionals. Organization of the educational process based on electronic software tools has a number of advantages, such as

rapid updating of educational materials based on the latest advances in science. As a result of the use of electronic teaching software in education, the teaching process is individualized. Each student will have the opportunity to master the educational material based on the plan, relying on their individual creative abilities.

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