

SCIENTIFIC AND PRACTICAL BASES OF CREATION AND USE OF ELECTRONIC EDUCATIONAL RESOURCES IN EDUCATIONAL PROCESS

Fotima Umarova - doctoral student

Zakhro Umarova - Engineer programmer at Information Technology Center

Khusan Umarov - teacher of Tashkent State Pedagogical University

ABSTRACT

This article analyzes the modern methods of the educational process and explains how to improve and improve the quality of the educational process. According to the author, the organization of the educational process using information technology will not only facilitate the organization and conduct of classes for the teacher, but will also increase the knowledge and skills of students.

Keywords: Electronic educational resources, scientific and practical bases creation and use, educational process.

INTRODUCTION, LITERATURE REVIEW AND DISCUSSION

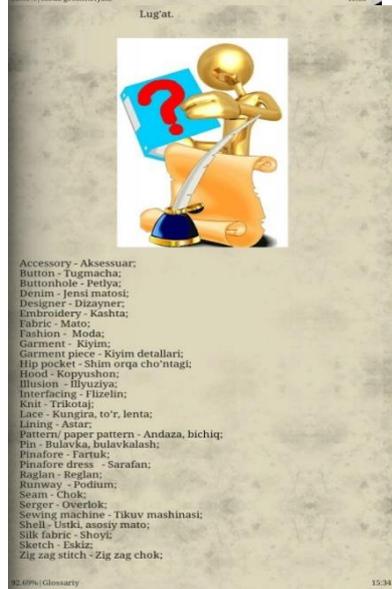
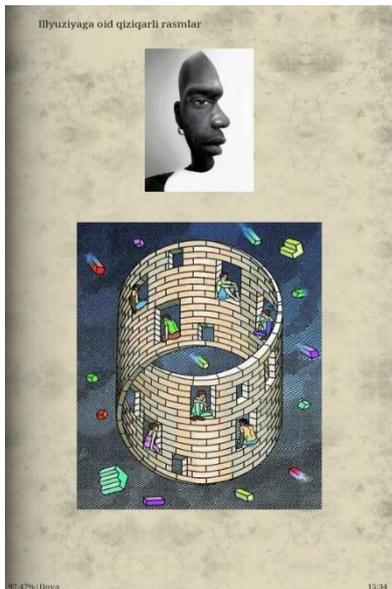
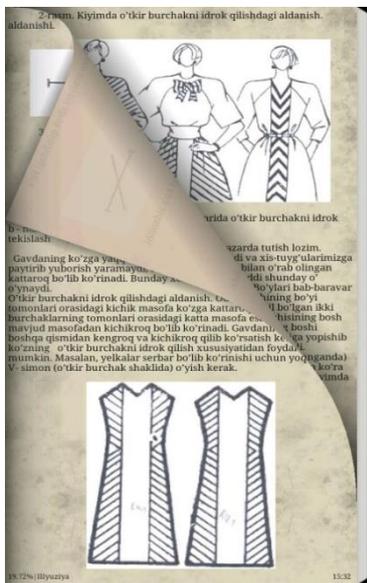
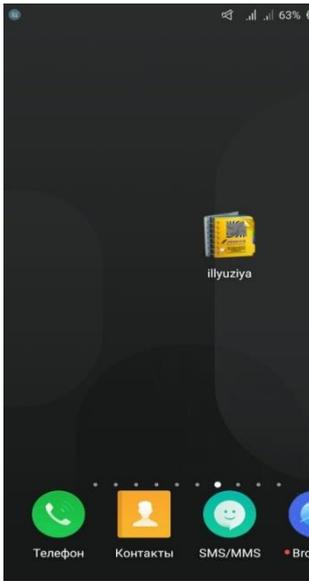
The present days and the future of our country are in the hands of our highly educated and enlightened youth. [1] Reforming the system of continuous education in the Republic of Uzbekistan is aimed at forming a new generation of professionals with the highest professional culture, creative and social activity, and independent participation in social and political life [2-3]. It is no secret that in today's market economy, the development of our society requires new technologies, including new information and communication technologies. In particular, the widespread introduction of multimedia and web technologies, and the intensive study of computer-generated graphics, animation and video technology require computer literacy. In recent years, Uzbekistan has taken some measures to develop computerization and information and communication technologies. A legal framework has been established that defines the important economic, legal and organizational basis for the functioning of information and communication technologies in the field of information and telecommunications. Including, the Law of the Republic of Uzbekistan "On informatization", the Decree of the First President of the Republic of Uzbekistan I.A. Karimov PF-3080 "On further development of computerization and introduction of information and communication technologies" dated May 30, 2002, and Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 200 of 2002 "On measures for further development of computerization and introduction of information and communication technologies". One of the peculiarities of the accelerated phase of modern scientific and technological development is the computerization of all aspects of social life, which drastically alter the structure of professional activity. The use of information technology at all levels of the education system creates a daily demand for education informatization, which in turn requires graduates of educational institutions to be able to work in new information environments [4]. The need to develop the skills of future professionals to work with information technologies is, first, the introduction of new intellectual education resources into the educational process, and secondly, ability to create and the use of e-learning resources in specific disciplines of future teacher of professional education ; thirdly, it is related to the full realization of opportunities for improving the effectiveness of the teacher's professional activity. [5-6] When it comes to e-learning resources used in the education system,

we first need to determine what is the "e-learning resource" and which educational tools are relevant to it. The e-learning resources include e-textbooks, tutorials, instructions, multimedia tools, directories and dictionaries, hypertext, e-tests and assignments, as well as resources for learning that are relevant to the learning process. It is recommended that the structure and content of the e-learning resource meet the didactic laws of special subjects taught in higher education institutions: [5]

1. Determination of the purpose and outcomes of special subjects teaching;
2. Determine the necessary software for the e-learning resource;
3. Choosing audiovisual learning tools (audio and video converters);
4. Use of multimedia technology (graphics and animation softwares: CorelDraw X3, Adobe Photoshop CS4, Autodesk 3dsMax, Autodesk AutoCad - 2007);
5. Development of animations on specific science topics (animation programs: Macromedia Flash, Tech Smith Camtasia Studio 8.0);
6. Development of e-learning and methodological support of science content (Macromedia Dreamweaver, Teachbook Constructor);
7. Implementation of e-learning resources in the learning process;
8. Continuous introduction of scientific and technological innovations. Designing an e-learning resource system uses an object-oriented approach. Initially a new folder will be opened on the computer's D: / disk for the e-learning resource of a specific subject, with electronic text, graphic, audio, and animation tools available for the purpose of the course. For this purpose, the most widely used are CorelDraw X3, Adobe Photoshop CS 4, Autodesk 3dsMax, Autodesk AutoCad - 2007 and marvelous Designer. The CorelDraw X3 software creates graphical images of a sketch of women's outer garments on the basis of vector graphics, and objects in the files are saved in a separate folder in JPEG format. In Adobe Photoshop CS4, digital images can be processed in different formats: applying filters, zooming, coloring, and combining multiple images into a single file. Three-dimensional images and video clips are created in Autodesk 3dsMax. With Autodesk AutoCad - 2007, two-dimensional images of components, such as the basic construction, model construction, patterns, and technology knots of women's outerweares are created. The files of this program are DWG format and converted to JPEG format using Adobe Photoshop CS 4 to place them on web pages. Teaching book materials are written in Microsoft Office Word - 2007, referring to the Teachbook Constructor to convert the finished files into a single electronic system, the educational resource. With Teachbook Constructor, there is a set of commands for integrating audio and animation components into the e-learning resource.

When the training material is available electronically, we must keep in mind that the process of perceiving information from a computer screen is 25-30% complicated. Therefore, the design of the e-learning resource, the correct selection of the dashboard and the location of the learning window should be psychologically relevant to the age and ability of the students to learn. It is preferable to choose primarily blue, green, white and light gray. Colors like these make it easier for people to grasp their senses and do not tire the reader's eyes while reading the text.

Once the theme has been explained in the lecture, the students will be given the opportunity to practice at home and learn the information provided in the program. The program presents solutions to the problems faced by clothing designers, and it is the responsibility of the subject teacher to review them. Then, at the beginning



of the practice, the group members are subdivided into subgroups, and each group is given a separate task. Each group member is assigned individual roles. There will be one designer, constructor and technologist in the group. For example: "Since there is no person in nature who has an ideal size, choose a style and silhouette that suits the customer and hides these flaws. Your customer's neck is short and thick, but she ordered a cute outfit for the party. Measure her, propose a suitable pattern, and, when persuaded, build the design of the item and model it according to the pattern. Embroider the garment and sew it based on the technology." The course is monitored by a teacher. At the end of the lesson each group will present its own model. The teacher will present and evaluate the team members according to their work, quality, mistakes and shortcomings.

In sum, using these mobile applications to enhance students' newfound knowledge of designing clothes helps them to master the subject and save time for the teacher, while helping students gain more knowledge at a convenient time and place. The ease of the use of such software does not cause any problems. This program starts with just a single finger click on the icon on the phone screen, and it is easy to scroll to the next information with ease, such as book scrolling, or through the hyperlinks. Another advantage of this program is the control questions to check the acquired knowledge upon completion of the information provided.

REFERENCES

1. Islam Karimov "High spirituality is an invincible force." T., "Spirituality". 2008
2. The Law of the Republic of Uzbekistan "On Education"
3. "The Role of the Harmoniously Developed Generation in Uzbekistan" - T., "Sharq", 1997, pp. 20-29.
4. Muslimov N., D.Sayfurov, M.Usmanbaev and A.Turayev. Creation and implementation of electronic educational resources on the basis of Web-technologies. - T., 2015
5. Abdukodirov A. A. and others. Information technologies. - T., 2002.
6. The Law of the Republic of Uzbekistan "On the National Program for Personnel Training". "Harmoniously Developed Generation - the Pillar of Uzbekistan's Development" - T, Sharq, 1997, pp. 31-61.
7. Parpiev A., Marakhimov A., Khamdamov R., Begimkulov U., Bekmuradov M., Taylakov N. Electronic University. Distance learning technologies. State Scientific Publishing House of the Uzbek Academy of Sciences. -T.: 2008, 196 p.
8. Aripzhanova M.A. Technology of developing informational - didactic means for teaching special disciplines in professional colleges. // Scientific-methodical journal "Educational technologies". No. 2 (52). 2015 - 11 - 1376 b.
9. Khaknazarova ZK, EE Tadjibaev. Formation of skills of working with information and communication technologies in teaching special subjects for students of professional colleges. // Proceedings of the Republican scientific-practical conference "Problems of introduction of innovative technologies in retraining and advanced training of teachers", Tashkent 2014. -B. 314-316.
10. Khaknazarova ZK, Isakulov VT Innovative conditions for the formation of information and graphic competence of future vocational education teachers. // Scientific-methodical journal "Educational technologies". No. 2 (52). 2015 - 70 - 75 b.
11. Khaknazarova ZK Innovative opportunities of teaching technology of light industry products. // Republican scientific-practical conference "Actual problems of innovation technologies in the integration of science, education and industry", Part II, Collection of scientific articles, 29-30 November, Tashkent-2013, -B. 279-282.