International Journal of Pedagogics
(ISSN – 2771-2281)
VOLUME 03 ISSUE 05 Pages: 157-160
SJIF IMPACT FACTOR (2021: 5. 705) (2022: 5. 705) (2023: 6. 676)
OCLC – 1121105677
Crossref doi Google Scholar WorldCat MENDELEY
Publisher: Oscar Publishing Services

Journal Website: https://theusajournals.com/index.php/ijp

Research Article

INCREASING LESSON EFFICIENCY WITH THE USE OF DIGITAL TECHNOLOGIES IN THE EDUCATIONAL PROCESS

Submission Date: May 21, 2023, Accepted Date: May 26, 2023,
Published Date: May 31, 2023
Crossref doi: https://doi.org/10.37547/ijp/Volume03Issue05-30

Rakhmonov Mirzokhid Shavkatovich
Andijan State Pedagogical Institute, Uzbekistan

ABSTRACT

This article describes multimedia digital learning, a software development program, an animation material preparation schedule, multimedia training, and a two-way simulator for students.

KEYWORDS

Digital technologies, digital e-learning, electronic teaching aids, animated graphics, multimedia digital education, multimedia educational complex, Adobe Photoshop, AutoPlay Media Studio.

INTRODUCTION

The use of a text format in the submission of educational materials is now seen as an obsolete tool, but not outdated. Most students, learners, independent learners prefer to use digital technologies for learning. There are several positive reasons for this. Here are some of them:

- Faster than text information;
- Lack of time travel when receiving information;
- visualized information is easier to digest and understand than simple textual information;
- High visual quality of digital, multimedia educational materials;
- the possibility of multiple viewing, stopping (pausing) digital, multimedia educational material;
- Easy assimilation of educational material through features such as reading, vision, hearing, understanding and practice in digital, multimedia educational material;
- To be able to use a multimedia tool to show visualized models of objects that are difficult to show and describe in the text on the natural sciences, to create a clear idea of the object for students;

International Journal of Pedagogics
(ISSN – 2771-2281)
VOLUME 03 ISSUE 05 Pages: 157-160
SJIF IMPACT FACTOR (2021: 5. 705) (2022: 5. 705) (2023: 6. 676)
OCLC – 1121105677
Crossref doi Google Scholar WorldCat MENDELEY
Publisher: Oscar Publishing Services

- Students have the opportunity to transparently assess their knowledge using digital technological test programs in the assessment system, etc.

Multimedia, digital means usually means a set of hardware and software that allow a person to communicate with a computer using various natural means: graphics, hypertext, sound, animation, video. To date, multimedia systems can provide students with the following types of information:

- text (doc, html); images (bmp, gif, jpeg,...);
- animated pictures (gif, flc, fli);
- sound signals (wav, au, MIDI, real audio);
- digital video (avi, mpeg) and others.

Visual means in their capabilities far exceed the capabilities of all other channels of information perception by a person. Modern information technologies make it possible to create teaching aids using not only colorful illustrations, but also various types of video films (animation, documentaries and feature films).

Documentary videos (fragments of "live" video) turned out to be the most effective means of initial acquaintance with the subject of study as part of electronic multimedia educational and methodical complexes (EMCM). They are widely used to demonstrate technological processes, the operation of machines, etc. Animation is the most suitable tool for explaining the mechanisms of the processes under study, especially in the form of videos (you can draw anything).

A very promising direction is the explanation of theoretical structures called animated graphics, for example, the graphical arrangement of the processes under study, shown analytically. Modern application software packages make it possible to graphically display very complex two- and three-dimensional relationships. Fixing the corresponding slides filled with explanatory texts and graphics allows you to create amazing pieces of educational materials in the form of animated fragments of educational materials [4].

Multimedia audio components can complement and enrich video clips. However, they can be of great independent importance, for example, for activating attention, emphasizing certain points of the material presented. An even greater effect is provided by the use of sound accompaniment to the test samples of MOUM. In the process of constructing a search trajectory for such a solution, there may be encouraging exclamations with the correct answer or voice correction.

In the near future (there are real prototypes), we can expect the implementation of "voice password" technologies. In addition, answers to security questions can be "rigged", which is a step towards solving the problem of remote testing in general. In particular, we are talking about building intelligent certification systems. Their use allows you to quickly control knowledge and receive answers, taking into account voice recognition, set the time for searching for answers, analyze the search logic and compose a response.

Intelligent assessment systems allow the student to more rationally determine the individual trajectories of their education. An important promising area of application of multimedia technologies is the development of virtual worlds and their predecessors - multimedia simulators. In particular, early projects to unite students in virtual laboratories showed the promise of such technologies. At the same time, it is possible to carry out laboratory work and study

International Journal of Pedagogics
(ISSN – 2771-2281)
VOLUME 03 ISSUE 05 Pages: 157-160
SJIF IMPACT FACTOR (2021: 5. 705) (2022: 5. 705) (2023: 6. 676)
OCLC – 1121105677
Crossref doi Google Scholar WorldCat MENDELEY
Publisher: Oscar Publishing Services

processes that, in principle, cannot be carried out in real conditions.

One of the most important components of an electronic multimedia textbook for the training of teachers is a full-fledged simulator that allows the student to acquire practical skills in a particular subject being studied. A number of training courses require mastering and mastering the skills of working with specific instrumental computer programs (for example, tool environments for creating expert systems, accounting systems, etc.), as well as object and process management systems (for example, for training).

It is clear that the saturation of the multimedia educational system with audio and video components will only have a negative result. Each MOUM component requires a certain number of multimedia tools.

High-quality educational materials are a collection of scientific and pedagogical knowledge, and the demand for them increases over time. Today's terms for the creation of MOUMs are such that by the time of their mass appearance, the technical capabilities of consumers will be equal to or higher than the level of technical requirements they require.

To improve cognitive efficiency when using digital technologies in the educational process, the following important factors can be achieved:

- creating clear ideas for students who have difficulty with imagination;
- assimilate real concepts from an abstract concept using a visual simulator of events and phenomena;
- to help different opinions on the topics of science to come to a consensus;
- Nazariy fikrlangan objectlar amaliy fikrlash va object turisidagi bilimlarni khosil qilish;
- to achieve the development of figurative thinking with the help of moving graphs and diagrams;
- development of independent work skills;
- increase and improve their interest in science;
- increasing determination and self-confidence when using a computer in practical exercises;
- all types of human memory are developed with the help of multimedia.

Today, on the basis of digital technologies, various systems and self-study programs are produced: training, control, impartial and transparent assessments, electronic textbooks and reference books.

The sphere of computer graphics is impossible to imagine without Adobe Photoshop. This program has many more features than raster graphics. We work with masks, layers, shapes to make an animated banner. You can create animated images using Adobe Photoshop.

AutoPlay Media Studio is one of the application packages created for creating multimedia projects. With it, you can create electronic textbooks, electronic textbooks, CD \ DWD covers, presentations, simple games, electronic photo albums, conveniently view and display a collection of video files. After all multimedia objects are ready, their autoplay will be arranged using the AutoPlay Media Studio program, and a multimedia educational and methodological complex will be prepared.

From the above points, we can conclude that the use of digital technologies in the educational process can increase the effectiveness of the lesson. Because the use of multimedia digital technologies during the lesson helps to understand the concept of the subject

International Journal of Pedagogics
(ISSN – 2771-2281)
VOLUME 03 ISSUE 05 Pages: 157-160
SJIF IMPACT FACTOR (2021: 5. 705) (2022: 5. 705) (2023: 6. 676)
OCLC – 1121105677
Crossref doi Google Scholar WorldCat MENDELEY
Publisher: Oscar Publishing Services

in the mind of the student, to develop the skills of independent thinking.

REFERENCES

1. Ghafarov F.H. "Possibilities of effective use of modern educational and didactic tools in the educational process". Modern education/Sovremennoe obrazovanie. 2017, 8.
2. M. Sh. Rahmonov, N. K. Saidova. Practical steps of making an animated banner for a web page in Adobe Photoshop. 265 p. PEDAGOGS legal, medical, social, scientific journal IN ALL AREAS Volume-7, Issue-1, April-2022.
3. M. Sh. Rahmonov. Possibilities of software tools in preparation of electronic training manuals. 539 p. NamDU Scientific Bulletin. Issue 3 of 2021. M. Sh. Rahmanov. Possibilities of software tools in preparation of electronic training manuals. 539 p.
4. Rusak A.D. Multimedia technologies in the educational process. Innovative technologies in the educational process: materials of the 50th scientific conference of graduate students, undergraduates and students. (Minsk, March 28, 2014). - Minsk: BSUIR, 2014. - 92 p. Page-4.
5. Sarsenbaeva R.M. "Technology of using demonstration and distribution materials in lessons". Modern education/Sovremennoe obrazovanie 2015, 2.
6. Timoshenko O.A. The use of video aids in the classroom as an element of improving the quality of professional education. Psychology and pedagogy: methodology and problems.
7. Rodin V. P. Creation of an electronic textbook: Textbook. - Ulyanovsk: UlGTU, 2003. -30 p.
8. http://urok.1sept.ru/articles/526252 - Festival of Pedagogical Ideas "Open Lesson" (Murojaat etilgan sana: 8.11.2021)