FEATURES OF DIGITAL EDUCATION AND DIGITAL LEARNING RESOURCES IN HIGHER EDUCATION

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Annotations:

In this paper, the authors explore what opportunities are provided by digital resources to improve the quality of student learning. Particular attention is paid to the interactivity, accessibility and flexibility of such resources. Considers the advantages and disadvantages of digital education for students and teachers, and also analyzes the role of digital resources in modern higher education.

Keywords: Digital learning, e-learning resources, interactive technologies, multimedia resources, online courses, virtual lectures, educational applications, multimedia presentations.

Digital education is becoming increasingly relevant in today's world where technology plays an increasingly important role in people's lives. Due to the rapid development of information technology and the Internet, digital education provides unique opportunities for learning and development for both students and teachers [1].

Firstly, digital education allows you to study any subjects and courses at any time and from any place. This is especially important for people who are unable to attend traditional classes due to work or other commitments.

Secondly, digital education enables individualized learning and adaptation to the needs of each student. Technology can be used to create personalized learning programs that take into account the abilities and needs of each student.

Thirdly, digital education helps to reduce education costs. It can be cheaper than traditional education because it does not require the cost of renting premises, paying teachers and transport costs.

To effectively conduct digital learning, it is necessary to create a special platform that will host training materials, assignments, tests and other learning tools. On such a platform, students will be able to view lectures and complete assignments at any time and from anywhere. Effective digital learning requires the quality of learning materials. Teachers should develop presentations, lectures, video lessons and other materials that will be available to students on the platform.

More information about this source textFor more information, enter the source text Online courses can be more convenient for students than traditional classroom courses. They can be more flexible, allowing students to study the material according to their own schedule. Online testing allows students to test their knowledge and skills, as well as receive feedback from teachers. Tests can be automated and evaluated using special programs[2] on the platform.

It is important to provide support for students in the digital learning process. This can be done through forums, email, and online consultations with educators.

At the same time, it is possible to evaluate the effectiveness of digital learning. Performance evaluation includes collecting data on how students use the platform, test results, as well as assessing the level of student satisfaction with using the electronic platform. This data helps to determine the success of the program and make the necessary changes to improve it.

Nowadays, computers and Internet technologies are an integral part of our lives, and education cannot remain aloof from this process. E-learning materials can be easily and quickly obtained, downloaded or printed. They are available for use anytime, anywhere. E-learning materials can be presented in various formats: text documents, video tutorials, presentations, tests, etc. They may also contain interactive elements that allow students to more deeply understand the material being studied[3].

The use of digital learning materials allows you to save time searching for information in libraries or on trips to the teacher. It also reduces the cost of purchasing textbooks and other materials.

E-learning materials can be tailored to the student's needs, allowing them to learn at their own pace and at their own level. The use of digital learning materials allows students to work together on projects, share information and receive feedback from the teacher.

It is important to mention that digital education and the use of digital learning materials can improve the efficiency of the educational process and make it more accessible to all students, regardless of where they live or the availability of resources.

The preparation of digital learning resources (SDGs) requires a specific approach and specialized knowledge. Some features to consider when developing the SDGs include:

1. Target Audience: When designing the SDGs, the needs and interests of the target audience need to be taken into account. It is important to create content that is understandable and accessible to users.

2. Structure and design: For an SDG to be attractive and user-friendly, its structure and design need to be thought through. It should be easy to understand and use, have a simple interface and easy search.

3. Content: Content is a key element of any SDG. It is necessary to develop materials that will be informative, relevant and interesting for users.

4. Technical aspects: When creating SDGs, it is important to take into account technical aspects such as compatibility with various platforms and browsers, page loading speed, etc.

5. Interactivity: The use of interactive elements such as quizzes, games, video tutorials, etc. can greatly enhance the effectiveness of the SDGs and enhance the user experience.

6. Maintenance and updating: SDG developers should provide support mechanisms for users and regular content updates to keep materials relevant [4].

The effectiveness of the use of digital learning resources can be expressed in the following aspects:

1. Increasing the availability of learning: e-learning resources can be accessed at any time and from anywhere in the world. This allows students to gain knowledge and skills without leaving their home or office.

2. Variety of material formats: e-learning resources can be presented in various formats, such as video lessons, interactive tasks, games and tests. This allows students to receive information in a format that best suits their individual needs and learning style.

3. Reduced learning time: With digital learning resources, students can master material faster than with a traditional learning method. This is due to the fact that they have the opportunity to study the material at their own pace and repeat it as needed.

4. Reduced training costs: The use of digital learning resources can reduce training costs, as there is no need to pay teachers and rent premises. In addition, students can use free online courses and materials, which also reduces tuition costs.

5. Increase student motivation: eLearning resources can be interactive and engaging, which increases students' motivation to learn. In addition, they can receive rewards for completing tasks and successfully completing tests, which also helps to increase motivation.

Thus, the use of digital educational resources can significantly increase the effectiveness of training by reducing the time for training, increasing the availability of materials and the diversity of information presentation formats.

And at the same time, some disadvantages of digital education can be cited:

1. Limited interaction: One of the main disadvantages of digital education is the limited interaction between teachers and students. This can result in students not getting enough individual attention and help.

2. Low Motivation: Another disadvantage of digital education is that it may not be suitable for all types of learners. Some students may have difficulty organizing themselves and may need a more rigid structure that they can only get in classical classes.

3. Problems with accessibility: In addition, not everyone has access to high-speed internet or computers, which can be an obstacle in order to receive a quality education.

4. Limitations in assessment: Another disadvantage of digital education is that it can be limited in the way students are assessed. Testing and multiple choice questions can be effective in determining knowledge, but do not always show how well students have learned the material.

The following software products are recommended for creating digital learning resources.

1. Author Content Management Systems (LMS) - Moodle, Blackboard, Canvas, etc.

2. Programs for creating interactive presentations - Prezi, Google Slides, etc. It allows you to create interactive slides with various elements such as text, images, audio and video.

3. Graphic editors - Adobe Photoshop, Canva, etc. These tools help you visualize information and organize it logically.

4. Software for creating video tutorials – Camtasia, Screencast-O-Matic and etc.

This allows you to create video tutorials with comments and demonstration of the process.

5. Services for creating online tests - Google Forms, Ispring, etc. This allows you to create interactive tasks and tests in the SCORM format.

6. Tools for creating digital books - iBooks Author, Caliber, etc.

7. Services for creating infographics - Piktochart, Infogram, etc.

8. Create blogs and websites using blogging platforms like WordPress or Blogger. This allows you to publish learning materials and communicate with students in an online environment.

9. E-learning courses on open access platforms – Coursera, edX, Udacity and etc.

Therefore, e-learning materials education has many promising benefits for students, teachers and educational institutions.

1. Availability: e-learning materials are available anywhere in the world with an internet connection. This allows students from all regions to access quality education.

2. Interactivity: E-textbooks and training programs can be created using interactive elements such as audio, video, animations, and quizzes. This makes the learning process more interesting and attractive for students.

3. Convenience: e-textbooks can be easily updated and changed as needed. They can also be used on any device with internet access, allowing students to study the material in their own time.

4. Savings: The use of digital textbooks can reduce the cost of purchasing paper books and other materials. It can also reduce the burden on the environment, as fewer trees will be cut down for paper production.

5. Individual approach: e-textbooks can be customized for each student, allowing them to study the material at their own pace and at their own level.

6. Control: e-learning materials can be processed in an automatic knowledge control system that allows teachers to track the progress of each student and evaluate their knowledge.

In general, the use of digital learning materials in education has great potential to improve the quality of education and reduce learning costs. However, greater access to the Internet and technical resources is needed if these benefits are to be made available to all.

References:

Digital learning: tools and technologies. - William Horton, Katherine Horton; [per. from English. Yu. V. Alabina] Moscow, 2005 Publisher: Kudits-Obraz: , 638 pages, ISBN: 5-9579-0068-0

Noraliev N.Kh., Yusupova F.E. Digital technologies in agriculture. - Questions of science and education, 2020, Pages 4-10. https://cyberleninka.ru/article/n/tsifrovye-tehnologii-v-selskom-hozyaystve

 Noraliev N.Kh., Tashbaev U.T., Khaidaraliev N.N. - The development of digital education as a factor in improving the quality of education. journal Questions of science and education, 10 (22), 2018. 42-44 p.
Noraliev N.Kh. Multimedia technologies as an effective way of learning in agricultural education. Conference materials: Agrarian science-agriculture. 2016 pp.102-104.

5. Ketova F.R., Noraliev N.Kh., Karshiev A.B., Temukueva L.M. Overview of digital platforms designed for the development of tourism in Russia. Conference materials Digital transformation of science and education. 2021 pp. 326-330.