

IMPROVING THE PROVISION OF ELECTRONIC EDUCATIONAL RESOURCES FOR TEACHERS IN SPECIALIZED SUBJECTS IN A VIRTUAL LEARNING ENVIRONMENT

Yuldosheva Nilufar Yusufovna

Teacher of Bukhara Innovative Education and Medical University

yuldoshevanilufar76@gmail.com

Tel: +998914441318

Annotation

This article is dedicated to studying the methodology for improving the provision of electronic educational resources for teachers in specialized subjects in a virtual learning environment. In the 21st century, the growing role of digital education and the effective application of modern technologies in the educational process, particularly electronic resources for teachers, are of significant importance. The article discusses the design of electronic resources in a virtual learning environment, their content, and the necessary methodological approaches to make them pedagogically effective. Electronic resources prepared for teachers in specialized subjects, such as video lessons, interactive exercises, online tests, and electronic textbooks, can improve the quality of teaching and develop students' independent working skills. Moreover, the article provides methodological recommendations for improving teachers' knowledge and skills, adapting them to digital educational technologies, and making the learning process more interactive and motivating. The research results will help teachers deliver their knowledge effectively in a virtual learning environment and provide higher-quality educational services to students.

Keywords: E-learning, research, pedagogical skills, digital technology.

Аннотация

Статья посвящена исследованию методологии улучшения обеспечения электронными образовательными ресурсами для преподавателей специализированных дисциплин в виртуальной образовательной среде. В XXI веке растущая роль цифрового образования и эффективное применение современных технологий в образовательном процессе, особенно электронных ресурсов для преподавателей, имеет большое значение. В статье рассматривается дизайн электронных ресурсов в виртуальной образовательной среде, их содержание и необходимые методологические подходы для обеспечения их педагогической эффективности. Электронные ресурсы, подготовленные для преподавателей специализированных дисциплин, такие как видеолекции, интерактивные упражнения, онлайн-тесты и электронные учебники, могут улучшить качество преподавания и развить у студентов навыки

самостоятельной работы. Более того, статья предлагает методические рекомендации по улучшению знаний и навыков преподавателей, их адаптации к цифровым образовательным технологиям, а также по созданию более интерактивного и мотивирующего образовательного процесса. Результаты исследования помогут преподавателям эффективно передавать свои знания в виртуальной образовательной среде и предоставлять учащимся более качественные образовательные услуги.

Ключевые слова: Электронное обучение, исследование, педагогические навыки, цифровые технологии.

Annotatsiya

Mazkur maqola virtual ta'lim muhitida ixtisoslik fanlaridan o'qituvchilarga mo'ljallangan elektron ta'lim resurslari ta'minotini takomillashtirish metodikasini o'rganishga bag'ishlangan. XXI asrda raqamli ta'limning o'sib borayotgan roli va zamonaviy texnologiyalarning ta'lim jarayonida samarali qo'llanishi, xususan, o'qituvchilarga mo'ljallangan elektron resurslar muhim ahamiyat kasb etadi. Maqolada virtual ta'lim muhitida elektron resurslarning dizayni, ularning mazmuni va pedagogik jihatdan samarali bo'lishi uchun zarur bo'lgan metodologik yondoshuvlar ko'rib chiqiladi. Ixtisoslik fanlari o'qituvchilari uchun tayyorlangan elektron resurslar, masalan, videodarslar, interaktiv mashqlar, online testlar va elektron o'quv qo'llanmalari orqali o'qitish sifatini oshirish va talabalarning mustaqil ishlash ko'nikmalarini rivojlantirish mumkin. Bundan tashqari, maqolada elektron ta'lim resurslarini ishlab chiqishda o'qituvchilarning bilim va ko'nikmalarini oshirish, ularni raqamli ta'lim texnologiyalariga moslashtirish, o'quv jarayonini interaktiv va motivatsion qilish uchun metodik tavsiyalar beriladi. Tadqiqotning natijalari o'qituvchilarga virtual ta'lim muhitida o'z bilimlarini samarali yetkazishda va o'quvchilarga yanada yuqori sifatli ta'lim xizmatlarini taqdim etishda yordam beradi.

Kalit so'zlar: Elektron ta'lim, tadqiqot, pedagogik mahorat, raqamli texnologiya.

Introduction

The widespread use of digital technologies in the educational process in the 21st century is leading to a new phase in the development of the education system. In particular, the development of the virtual learning environment is opening new opportunities for teachers to effectively deliver their knowledge and skills. The provision of electronic educational resources for teachers in specialized subjects is of great importance for improving the quality of education, enhancing students' learning outcomes, and organizing the educational process more effectively. By creating high-quality and innovative forms of electronic educational resources for teachers and using them pedagogically in the right and effective way, students' knowledge is being developed not only technically but also through engaging and

interactive content presentation. The virtual learning environment also encourages teachers to adopt new pedagogical technologies and methods, which, in turn, allows students to achieve higher results.

This scientific article analyzes the methodology for providing and improving electronic educational resources for teachers in specialized subjects. The goal of this research is to introduce teachers to modern digital educational technologies and to develop methodological recommendations aimed at equipping them with the necessary skills to create and use electronic resources effectively in a pedagogical context. This methodology aims to assist teachers in fully and effectively utilizing electronic educational resources at various stages of the learning process, as well as making the process more interactive, motivating, and highly effective. The following aspects will be discussed:

1. **Initial Analysis and Evaluation of Electronic Educational Resources**

The initial stage of improving the provision of electronic educational resources involves analyzing and evaluating existing resources. It is essential to study how electronic materials designed for teachers, such as video lessons, interactive programs, virtual laboratories, and tests, are perceived by students and teachers and how they impact the educational process. Through this evaluation, it is possible to identify the effectiveness of resources and develop methodological approaches to eliminate existing shortcomings[1].

Methods

- Surveys and interviews: Conducting surveys among teachers and students to gather feedback on existing resources.
- Statistical analysis: Analyzing the usage rate of educational resources, teachers' experience in using electronic resources, and students' learning outcomes.

2. **Transforming Electronic Resources into Pedagogical Products**

Electronic educational resources for teachers should not only be technically effective but also pedagogically sound. Resources must help develop students' independent thinking, creativity, and problem-solving abilities, not just deliver knowledge. Interactive elements, such as tests, problems, forums, and discussion boards, help teachers create pedagogically high-quality resources.

Methods

- Creating modules: Developing customized electronic modules for teachers, adding interactive exercises, videos, and elements that increase students' interest in learning.
- Activating students: Implementing gamification (adding game elements) and collaborative learning methods to ensure active participation in the learning process.

3. **Integration and Adaptation of Online Resources**

To improve the effectiveness of electronic educational resources, they must be integrated with other educational technologies and resources. For example, it is essential to guide teachers in using electronic resources adapted to their educational methodologies through distance learning platforms, video conferences, and virtual classrooms. This integration allows teachers to manage their work more effectively and provides students with the opportunity to reinforce knowledge using various resources.

Methods

- Working with Moodle and other educational platforms: Teaching teachers to use online educational platforms like Moodle, Google Classroom, and integrating resources on these platforms.

4. Training Teachers in Digital Educational Technologies

The effective use of electronic educational resources requires teachers to be proficient in digital technologies. Therefore, it is crucial to train teachers in digital educational technologies and integrate them into their pedagogical methodologies. It is important to regularly update teachers through training courses, seminars, and workshops, teaching them to apply new digital tools and methods.

Methods

- Training and seminars: Organizing special training sessions for teachers on applying digital educational technologies[2].

5. Feedback and Improvement

In the process of improving electronic educational resources, it is necessary to gather regular feedback from teachers and analyze this feedback. Collecting and analyzing feedback from students and teachers forms the basis for further improving the resources. It is essential to identify and correct technological and pedagogical errors and shortcomings.

Methods

- Online surveys and evaluations: Conducting regular surveys with students and teachers about electronic educational resources and obtaining recommendations for improvement.
- Iterative improvement: Regularly updating electronic resources and adding new technologies, while maintaining close collaboration with teachers and students.

Conclusion

The process of providing and improving electronic educational resources for teachers in specialized subjects in a virtual learning environment requires not only the enhancement of technical capabilities but also the modernization of pedagogical methods. To create an effective educational environment using electronic resources, it is necessary to implement the above-mentioned methods to increase teachers' digital competence and strengthen students' knowledge. These methods, in turn, will help

improve the quality of education and enhance the effectiveness of the educational process.

References

1. N.Yu. Yuldosheva. Methods for determining the scientific and creative potential of a teacher. A collection of materials of the international scientific and practical conference program on the topic of: “Problems and solutions for creating a new image of vocational educational institutions based on international experience and raising personnel training to a quality level” 2024, November 9. 740-742 pages.
2. N.Yu. Yuldosheva. Advantages of Crocadile ICT software in fast and easy calculation of algorithms. Advanced international experience in improving the education system international and technical conference. November 22-23, 267-270 pages.