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USE OF VISUALIZATION TOOLS IN THE SUBJECT "ORGANIZATION OF TRANSPORTATION AND TRAFFIC SAFETY BY AUTOMOBILE"

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Annotatsiya

Ushbu maqolada oliy ta'limda «Avtomobillarda tashish va xarakat xavfsizligini tashkil etish» fanidan talabalarning aqliy va bilish faolligini oshirishga yordam beradigan didaktik ko'rgazmali vositalardan foydalanish orqali o'quv jarayoni samaradorligini oshirish muammolari tahlil qilingan. O'quv materialini vizual texnologiya asosida namoyish etilishi ular ta'lim mazmunini multimedia va interfaol tarzda amalga oshirishga olib borishga imkon beradi. Bundan tashqari o'qituvchilar o'quv materialini tasavvur qilish hamda ularni amalda qo'llash metodlari va vositalarini o'zlashtirishlari zarurligi asoslab o'tiladi.

Kalit so'zlar: vizual, vizual texnologiya, multimedia texnologiyalari, interfaollik, talabalarning bilim faoliyati, vizual o'qitish vositalari.

Аннотатся:

В статье анализируются проблемы повышения эффективности учебного процесса за счет использования дидактических наглядных пособий, способствующих повышению интеллектуально-познавательной активности студентов по направлению «Автомобильный транспорт и организационная безопасность дорожного движения» в высшем учебном заведении. Подача учебного материала на основе визуальных технологий



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позволяет реализовать образовательный контент в мультимедийном и интерактивном виде. Кроме того, обоснована необходимость учителя представлять учебный материал и владеть методами и средствами его практического применения.

Ключевые слова: визуальное, визуальные технологии, мультимедийные технологии, интерактивность, познавательная деятельность учащихся, визуальные средства обучения.

Annotation

This article analyzes the problems of increasing the effectiveness of the educational process by using didactic visual aids that help to increase the intellectual and cognitive activity of students in the field of "Automotive transportation and organization of traffic safety" in higher education. Presentation of educational material based on visual technology allows them to implement educational content in a multimedia and interactive way. In addition, the need for teachers to imagine the learning material and master the methods and tools of their practical application is justified.

Keywords: visual, visual technology, multimedia technologies, interactivity, students' cognitive activity, visual teaching tools.

Introduction

In order to fundamentally improve the system of training highly qualified personnel for the transport sector of the republic based on advanced foreign experience and international standards, the widespread introduction of innovative forms and methods of training and modern pedagogical and information



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technologies into the educational process, as well as strengthening the material and technical base and further increasing the scientific potential of industry educational institutions, the Resolution of the President of the Republic of Uzbekistan dated May 4, 2020 No. PP-4703 "On Measures for the Fundamental Improvement of the Personnel Training System in the Transport Sector" was signed. Based on the needs of the transport sector, measures have been identified to organize the training, retraining, and advanced training of competitive specialists with higher education and scientific and pedagogical personnel in the labor market, as well as specialists of mass professions, conducting fundamental, applied, and innovative research on topical issues of transport sector development, and developing proposals for the widespread introduction of their results, including digital and other modern technologies.

Literature review

The improvement of the modern educational process, aimed at the formation of effective professional creativity in higher education, leads to the development of modern technologies with very wide possibilities in the selection of educational material. Therefore, with the increase in the innovative potential of the pedagogical visualization tool, it becomes possible to bring the methods of visual presentation of educational materials at different stages of professional activity to a modern level in accordance with the requirements of the time. An article by N.G. Ergashev on the topic "Software for presenting educational materials based on visual technologies in modern education" was published in the popular scientific-practical journal "Modern Education".



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Research Methodology

"Visualization" refers to the controlled presentation of data using images, graphs, tables to simplify perception and processing. After all, visualization comes from the Latin word "visualis" and is visual. Visualization in a general sense is understood as the process of presenting educational materials in the form of various static and dynamic images for ease of understanding. It is necessary to give any imagined object, object, process, etc., a visible form, to mechanically generate its image, to create clear, stable, and vivid images of any complexity and originality (really existing and created in the author's consciousness) using technical means or the formation of thinking (thought forms) directly with the help of consciousness (mental visualization) [1]. In the information society, the exchange of information is rapidly and significantly increasing, and new methods of presenting educational material based on visual technologies are being developed, which, in turn, places special demands on the activities of teachers on the formation of new visual technologies for educational materials [2].

Analysis and Results

The presentation of educational material based on visual technology is recognized as the most important direction for improving didactic tools. The didactic significance of the application of multimedia educational material based on visual aids is manifested, first of all, in the implementation of the principle of visualization in teaching. In particular, the training of transport engineers based on visual aids plays a significant role in developing their professional skills [3]. Therefore, as a result of the acceleration of the development process of the industry, there is a need to effectively organize the updating of information and its transmission to students through visual means.



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Based on the foregoing, when teaching the subject "Organization of Transportation and Traffic Safety by Road," teachers are required not only to have the skills of research, analysis, and processing, but also to have the ability to present educational material using visual technologies. Therefore, the main goal of teaching using visualization tools in the subject "Organization of Transportation and Traffic Safety on Automobiles" is to increase the effectiveness of the educational process through didactic visual aids that contribute to increasing the mental and cognitive activity of students. During the course, it is planned to teach students about vehicles and types of transported cargo, planned implementation of cargo and passenger transportation, methods of increasing vehicle productivity, and basics of cargo and passenger transportation by automobile [4,5].

Conclusion

Based on the foregoing, the effective use, application, and organization of visualization tools in the discipline "Organization of Transportation and Traffic Safety" in the training of personnel of transport engineers in technical higher educational institutions makes it possible to implement the principle of visualization in training. Also, the use of visualization tools creates convenience for teachers and allows them to continuously improve their qualifications. The use of visualization tools increases their interest in learning, science, and the profession they choose in the future [6].

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