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TA’LIMDA YANGI TEXNOLOGIYALARNING USTUNLIKLARI

ADVANTAGES OF NEW TECHNOLOGIES IN EDUCATION

ПРЕИМУЩЕСТВО ТЕХНОЛОГИИ В ОБРАЗОВАНИЕ

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Annotatsiya

Maqolada innovatsion texnologiyalarning zamonaviy tushunchasi, ularning roli va ahamiyati ko‘rib chiqiladi. Ta'limda yangi texnologiyalarning afzalliklari, muammoli ta'limda turli xil o‘qitish usullaridan foydalanish, muammolarni hal qilish, ushbu innovatsion texnologiyalarda muammoli vaziyatlar va istiqbollarini hal qilish vazifalari ko‘rib chiqiladi. Ta'lim jarayonini axborotlashtirish va raqamlashtirish samarasi ko‘rib chiqiladi, bu esa o‘quv jarayonini tashkil etishning ushbu fazilatlari butun zamonaviy jamiyatga xos ekanligiga, kadrlar tayyorlashni davr talablari asosida mantiqiy fikrlash operatsiyalaridan foydalanish va rivojlantirish orqali loyihalashiga qat'iy ishonch hosil qilishi kerak.

Abstract

The article examines the modern understanding of innovative technologies, their role and significance. The tasks of the advantages of new technologies in education, the use of various teaching methods in problem-based learning, problem solving, solutions to situations and prospects in this innovative technologies are considered. The effect of informatization and digitalization of the educational process is considered, which should create a firm confidence that these qualities of the organization of the educational process are characteristic of the entire modern society, the design of training in accordance with the requirements of the time, the use and development of logical thinking operations.

Аннотация

В статье рассматриваются современное представление об инновационных технологиях их роль и значение. Рассматриваются задачипреимущественовых технологий в образовании, использования различных методов преподавания при проблемном обучении, решении проблемных задач, выходы из ситуаций и перспективы в этом инновационных технологий. Рассматривается эффект информатизации и цифровизации учебного процесса, которые должны создать твердую уверенность в том, что эти качества организации учебного процесса характерны для всего современного общества, проектирование обучения в соответствии с требованиями времени, использование и развитие операций логического мышления.

Kalit so‘zlar: *axborotlashtirisheffekti, faoliyatsohasi, texnikavatexnologiya, fanningrivojlanishdarajasi, tizimislohoti, metodologikasos, davriyqo‘llash, spektr, sifatnita'minlash, modernizatsiya, raqamlashtirish.*

Key words: *informatization effect, field of activity, engineering and technology, level of science development, system reform, methodological basis, periodic application, spectrum, quality assurance, modernization, digitalization.*

Ключевые слова: *эффект информатизации, сфера деятельности, техника и технологии, уровень развития науки, системное реформирование, методическая основа, периодическое применение, спектр, обеспечение соответствия качества, модернизация, цифровизация.*

INTRODUCTION

In order to increase the effectiveness of scientific research, the broad involvement of young people in scientific activities, the formation of an innovative infrastructure of science in higher educational institutions, a phased implementation of the concept is being carried out, providing for a close link between education, science, innovation and commercialization of research results in higher educational institutions, attracting foreign investment, expanding the scale of paid services and other extra-budgetary funds, ensuring their activities on research and forecasting of socio-economic development of relevant industries, spheres and regions.

Creation of enterprises on the basis of higher educational institutions engaged in the implementation of the results of scientific research by creating new products, equipment and technologies with high potential for commercialization based on start-up projects at the expense of extra-budgetary funds, the development of academic entrepreneurship, the development of fundamental, applied and innovative scientific research, the preservation of existing and the creation of new scientific schools, strengthening their human resources potential, while stimulating the broad involvement of gifted youth in science, the direction of research works on the innovative solution of existing problems in the social sphere and economic sectors, including the regional level, a broad study of the problems of related sciences.

LITERATURE REVIEW

Higher education today is characterized by the use of a variety of psychological and pedagogical innovations, depending on which educational institution teaches a course of chemistry and biology and whether it is ready for the next steps to introduce new types of educational activities. In order to master innovative technologies, it is necessary to have the most detailed idea about them and highlight their characteristic features. Teachers can use educational resources that are freely available. Usually such resources are classified into sections according to the main disciplines of general education or areas of additional education. They contain educational and reference material. Students can also use these resources. Electronic tests, interactive models, colorful illustrations, ready-made designs, simulators and other educational and methodological materials contained in the sections of the resource will help teachers prepare and conduct interesting, informative, bright classes, and students will complete homework, research projects or other types of independent work.The key to the introduction of technology in education will always be determined by the teacher-student relationship, because that is where education takes place.[1] Technology can be a very effective tool, but it's just a tool. Technologies are not intended to replace the teacher, rather, the idea is to create a learning environment that will allow you to switch the organization of the educational process to cooperation and productive learning activities. Today we are at the first stage of technology implementation in education. The process of implementation may upset someone, irritate, take a lot of time and effort, but eventually technologies can "open the doors" to new experiences, discoveries, ways of learning and cooperation between students and teachers.

Modern technologies expand communication opportunities and create a more productive learning environment. Students, joining groups on the Internet, can exchange information, work together on group projects and interact with the teacher technology allows you to experiment more with pedagogy and get instant feedback. Modern technologies allow students to become more active participants in the educational process, and teachers to create new approaches, methods, models of teaching and upbringing. The learning process becomes more dynamic with the use of digital textbooks, when the student can use links to relevant materials or resources.The use of technological tools for the organization of project activities makes it possible to achieve significant changes in learning outcomes. Teachers have the opportunity to implement new models of the organization of the educational process.[2]

RESULTS AND DISCUSSION

Technologies help to ensure the active involvement of students in the learning process. Online survey and other digital tools help to involve all students in the learning process, including shy, unsure of their abilities, usually not showing initiative. Online systems allow you to receive regular feedback, including feedback from students about the availability of educational materials and assignments.Data analysis allows the teacher to easily and quickly identify the difficulties of each child and provide timely assistance, identify areas where students can compete, which means it is easy to adjust the work of each student or work in a group. For example, technology can significantly increase the effectiveness of using such an active learning method as a quiz. At the beginning of the lesson, the teacher can conduct a quiz using technical devices and quickly assess the starting level of students, spending only a few minutes to obtain reliable information and analyze it. Further, the teacher can make adjustments to the organization of the educational process objectively understanding where to direct their efforts and how to organize the work of students. Conducting the same quiz at the end of the lesson again will allow you to get feedback with minimal time, and students to evaluate the results and success of training.[1,2,3]There are many resources for organizing productive learning activities of students. There is no shortage of tools in mobile platform applications and electronic textbooks that significantly change the organization of educational activities. Some technical devices use various types of stimulation and help the assimilation of information in the learning process, apply competitive scenarios for the distribution of points and awards to make the learning process more exciting and attractive. An important condition for the use of such technical devices is the achievement of learning goals. Some mobile platforms and electronic textbooks include role-playing games in which students are given the opportunity to present facts and their arguments in favor of, for example, historical figures or scientific concepts. In addition, gaming technologies contribute to the introduction of healthy

competition into the educational process. Modern automated learning systems can significantly help in organizing productive learning activities and really evaluate the achievements of each student. Technologies will help the teacher to automate or simplify the performance of a number of tedious duties. Automation can simplify the execution and reduce the time for such routine, but time-consuming tasks, such as, for example, tracking attendance and the effectiveness of students' learning activities. Modern technological tools simplify the systematization and selection of individual tasks for students, help to track the activity of their participation in the discussion. The ability of modern technological means to visualize difficult-to-perceive and understand educational material reduces the effort and time spent by the teacher on explanation.For example, augmented reality technology allows students to create molecules of a complex chemical compound from atoms in a virtual environment using their own hands. Due to the effect of presence created by influencing the human senses, the technology makes it possible to demonstrate the process of creating a molecule or substance more effectively than a presentation on a screen or a picture on paper.[3,4]Technologies provide instant access to the necessary information and train important skills in working with sources. The value of the educational process increases if the information in textbooks or textbooks can be quickly updated and supplemented, including by the students themselves. Modern technologies expand communication opportunities and create a more productive learning environment. Students, joining groups on the Internet, can exchange information, work together on group projects and interact with the teacher. The ability to use technology is a life skill and an important type of literacy. Having digital literacy is more than having "separate technological skills." Today we are talking about a deep understanding of the digital environment, which provides intuitive adaptation to new contexts and joint content creation with other students. Creating presentations, learning to search for reliable sources on the Internet, and maintaining proper online etiquette are life skills that students can acquire in the educational process, and they will be useful to every child throughout their life.Digital literacy can help educational organizations not only improve the quality of education, but also allow learning outcomes to always remain relevant.

Students will need the ability to distinguish high-quality sources of information from unreliable ones. In educational organizations, you can create a list of electronic educational resources, information from which students can trust, use, copy and adapt.[5]

CONCLUSION

The advantages of innovative technologies are as follows: they enable students to acquire solid and conscious knowledge, develop independence in educational activities, increase the time of pronouncing educational material in the classroom, create a positive emotional mood, there is no fear of incorrect answers, a sense of confidence prevails, communicative culture increases, motivation for further education increases, student self-esteem increases, psychological stress is removed student and teacher tension.

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