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Annotation: The process of expanding the use of new information technologies in various educational areas, including school biology, requires a serious analysis from the standpoint of the didactic and methodological validity of the use of certain tools in the specific conditions of the educational process.

Key words: information technology, informatization, technology, teaching aids, educational equipment, informatics

Modernization of education in Uzbekistan has led to a revision of many important ideas and attitudes both in the education system itself and in pedagogical science. The most important target setting of the educational policy, according to the modernization of education, is "ensuring the modern quality of education on the basis of preserving its fundamental nature and compliance with the current and future needs of the individual, society and the state." Two main trends in the development of modern education: informatization and technology require serious changes not only in the field of content and methodology, but also updating the system of teaching aids. The introduction and use of computer technology and new means of communication and telecommunications in the educational process seems today not only a conscious necessity, but also a natural stage in the development of education. Currently, quite a lot of psychological and pedagogical, didactic, methodological works have been published on the use of information technology in biological education, and the number of publications on this topic is constantly increasing. But at the same time, there is a lack of scientifically-based methods developed to solve specific problems and issues of teaching biology at school.

The process of expanding the use of information technology tools in various educational fields, including school biology, requires a serious analysis from the standpoint of didactic and methodological validity of the use of certain teaching tools. Teachers, methodologists, and educational organizers face a number of issues that require methodological development.

One of the most important problems is the correlation of traditional learning tools with the means of new information technologies. Many methodologists recognize the need for the use of computer technologies in biology school teaching, but due to the still insufficient development of the theory and methodology of their application, the little studied their effectiveness and efficiency, there is a whole range of opinions in the scientific and pedagogical environment about the use of these tools and technologies.

In the works of various authors, it is often pointed out that there is a contradiction in educational practice between traditional attitudes and elements of learning and changing cultural conditions, the need to introduce innovative technologies and tools into the educational process. A reasonable and methodically sound combination of traditional and innovative can serve as the basis for the optimal organization of education at school and university. The importance of coordinating the means of new information technologies with traditional means of teaching, the creation and implementation of a scientifically based methodology for their integrated application, as well as the lack of elaboration of this issue determine the problem of research, which consists in the objective need for scientific and methodological justification and the development of a methodology for the integrated use of traditional and computer tools for teaching biology in high school college.

The process of expanding the use of information technology tools in various educational fields, including school biology, requires a serious analysis from the standpoint of didactic and methodological validity of the use of certain tools in specific conditions of the educational process.

In a modern school, educational technologies are closely related to information technologies and significantly depend on them, and the problem of using new information technologies in school education is being actively developed by psychologists, didactics, methodologists, as well as practical teachers.

Anticipating the consideration of the role and place of new information technologies and computer tools in the educational process, the possibility of their complex application with traditional means, it is necessary to make a number of terminological clarifications, important not only from the point of view of the formation of the conceptual apparatus, but also from methodological positions. First of all, this concerns the concepts of "information technology", "pedagogical information technology", "new information technologies of education". Subsequently, the concepts of "learning tools", "educational equipment", "new information technology tools" will be considered.

In the explanatory dictionary (Dictionary of computing), information technologies (IT) are defined as areas of human activity related to the creation and use of systems and devices for processing and transmitting information. (Zh. Tolipova): "Information technologies are usually understood as the organization of such a learning process in which the cognitive activity of students is controlled through a specially developed information product that transmits the educational content to be assimilated."

According to the classification of information technologies proposed by the problems of computer science, the following types of IT are distinguished:

1. Functionally-oriented IT is designed to implement one of the typical relatively autonomous tasks of information processing. They have a fairly high degree of versatility. This class includes mathematical calculations, symbolic transformations, mathematical modeling, algorithmization, programming, processing of text information, images and signals, information transmission, etc.

2. Problem-oriented IT occupies an intermediate position between functionally-oriented and subject-oriented IT. The creation of such IT is a consequence of the system generalizations of the first and second IT based on the formation of standard modules for the organization of automated information service systems: databases, information retrieval systems, expert training systems, desktop publishing systems, etc.

3. Subject-oriented IT is designed to solve specific specific tasks in a certain field of activity.

With regard to general biological education, the factors that are associated with the need to revise the content of general biological education based on the information approach are indicated:

1. The means of informatization act as special anthropogenic environmental factors, which requires adequate changes in the content of biological education.

2. The informatization of research in the field of biomedical sciences, the widespread use of the achievements of fundamental and technical informatics stimulate the formation of new areas of research, allow for a new understanding of previously known facts.

3. The process of informatization of society has caused profound changes in the material, technical and technological bases of medicine and industries based on the use of living organisms.

The majority of methodologists recognize the need to use computer technologies in biology school education, but due to the still insufficient development of the theory and methodology of their application, little research into their effectiveness and efficiency, among methodologists, teachers, education organizers, there is a whole range of opinions about the use of these tools and technologies.

Literature:

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