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USE OF WEB-QUEST EDUCATIONAL TECHNOLOGY IN THE DEVELOPMENT OF STUDENTS' BIOLOGICAL COMPETENCE

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Annotation

This article presents proposals and recommendations for the use of web-quest educational technology in the development of biological competence of students and the possibilities of web-quest educational technology.

Keywords: web-quest, information-educational environment, educational platform, hyperlink, competence.

Web-quest educational technology combines active learning methods and the advantages of interactive technologies by searching for educational information related to the subject using educational environments located at the addresses of the global network [1, 2]. Also, web-quest educational technology is a process based on a system of rules for organizing interaction between teachers and students, guaranteeing pedagogically effective cognitive communication [3]. As a result, conditions are created for students to achieve success in education and develop their activity and professional competence [4]. Therefore, the use of web-quest educational technology in the development of students' biological competence is one of the important issues in today's digital society.

In this regard, research work was carried out by Y.A. Igumnova [3], I.V. Radetskaya [3], U.M. Mirsanov [5], O.V. Volkova [6], G.A. Vorobyov [7]. Based on the analysis of their research, the following features of web-quest learning technology can be cited:

- the possibility of obtaining knowledge by searching for information related to the subject using hyperlinks is created;
- increases positive motivation in education;
- ensures differentiated education;
- creates the possibility of independent learning;



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- develops the student's competence by creating mental problem situations.

In our opinion, web-quest educational technology primarily forms the ability to use the global network, including information and educational environments, educational platforms, and hyperlinked learning tools, to search for educational information related to biology. Secondly, it increases the effectiveness of biology classes by creating a problematic environment for the development of students' active cognitive activity in nature.

Thus, when working with a large amount of information related to biology, web-quest educational technology develops skills and abilities in critical thinking, making a choice, taking responsibility for it, assessing the effectiveness of information search, and correctly determining the volume of information provided. Also, when teaching biology and preparing various practical projects using web-quest educational technology, the following goals are achieved for students:

- educational. Involving each student in the active learning process, organizing their individual and collective activities, and improving the skills and abilities of independent work in biological sciences;

- developmental. Increases students' interest in biology, develops their creative abilities, and forms research skills, oratory skills, and independent work with literature and internet resources;

- creativity. Forms qualities of responsibility for the completion of practical assignments in biological sciences.

As in any project, the use of web-quest learning technology is a complex task that requires systematic efforts from the performer. In the process of project work, students' research activities in the field of biology are aimed at achieving the results of studying a meta-topic related to the use of digital technologies for solving communication and cognitive tasks, including searching, collecting, processing, analyzing, organizing, and transmitting information, creating the following possibilities [8]:

- influences the development of the student as an active subject by presenting a solution to the problem posed;

- increases the ability to effectively use the information capabilities of the global network.



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In conclusion, web-quest educational technology, like any pedagogical technology, has a constant part, represented by the structural elements reflected in the technological map and the requirements for their content. Therefore, it should be used in the development of students' biological competence.

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