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**UNIQUE OPPORTUNITIES OF USING ELECTRONIC EDUCATIONAL RESOURCES IN BIOLOGY LESSONS*****Qaraxonova Lobarxon Musaxonovna****Senior Researcher, (Phd), Head Of The Department At Scientific Research Institute Of Pedagogical Sciences Of Uzbekistan Named After T.N. Kari Niyazi, Uzbekistan****Nizamiddinova Mashxura****Master's Student At The Uzbek-Finnish Pedagogical Institute, Uzbekistan***ABOUT ARTICLE**

Key words: Information systems, data banks, institution, organization, websites of pedagogues and students, information resource centers, electronic information-educational resources, virtual laboratories, media and video lessons, electronic document exchange system, video conference communications, online contests on the intranet network, increasing the effectiveness of the educational process as a result of the innovative and innovative activity of the teacher, electronic educational resources by means of computer technology.

Abstract: Multimedia tools have been created for many subjects of general secondary schools, and now attention to the organization of the educational process in a computerized environment has developed significantly. Educational software tools now cover many subjects. This article discusses the unique methods and possibilities of using digital educational tools, including electronic educational resources, in biology classes.

Received: 21.01.2024**Accepted:** 26.01.2024**Published:** 31.01.2024**INTRODUCTION**

Today, information systems, data banks, websites of institutions, organizations, pedagogues and students, information resource centers, electronic information-educational resources are separate components of the actual informational educational environment in the public education system. , virtual laboratories, media and video lessons, electronic document exchange system, video conference connections, on-line contests on the intranet network serve to make all participants in the system active users, and wide introduction of information and communication technologies into the educational process.

When it comes to the use of electronic resources, first of all, its development and introduction into the educational process is often the result of a lot of work of the teacher. That is, the production or creation of electronic educational resources - that is, if we come to the direction of the field, the necessary

software developments for the direct educational process are developed by teachers or research pedagogues. Of course, an electronic educational resource will be created based on the creative and technical cooperation of programming specialists.

It should be noted that as a result of innovative and innovative activity of the teacher, an ETR product is developed that serves to increase the effectiveness of the educational process. It is reasonable to conditionally organize the process of introduction of electronic educational resources to the subject of biology in general secondary schools at the 3rd stage [22,26]:

The first stage is called "Skills to use electronic resources" and it includes several tasks:

- formation of teachers' skills in organizing the educational process with the help of electronic educational tools. At this stage, it is required to have the ability to introduce visual interactive educational tools related to the subject of the lesson in each educational subject, including the subject of biology. These electronic educational tools should be clearly structured, rich in information, and lively. It is necessary for the teacher to plan in what part of the educational process he can use the electronic resource;

- introduction of electronic educational resources into the teaching process of each subject with the help of modern computer technology. It consists in clarifying, sorting, distributing the existing electronic resources that serve to increase the efficiency of biology education and turning it into a means of improving the biology teaching methodology;

Organization of educational lessons within the framework of teachers and students in the 2nd stage of continuous organization of ETR and the concepts of having information about it. At this stage, modern computer classes, methodical office and electronic library will be organized. Since the school administration is provided with a modern computer tool, there are opportunities to directly monitor the course processes. The systematic organization of improving the knowledge of teachers using electronic educational tools creates conditions for the introduction of ETRs into the educational process within a certain period of time.

The second stage is the development of integrative communication in the teaching of academic subjects with the help of information and communication technologies. In this, along with the subjects of general secondary education, it is necessary to introduce permanent computer technology in the teaching of biology. In it, the methods, methods and forms necessary for computerized education in general secondary education subjects are scientifically studied and developed.

Based on the methodical ideas of teachers to improve the effectiveness of biology lessons, the collaborative work of the members of the method association council, and the mutual support of the specialists of the information resource center in secondary schools, it is possible to create an informational environment in biology lessons. By improving the introduction of electronic resources to biology lessons, not only the quality of presentation will increase, but the use of non-traditional methods in the educational process (problem situation, group work, brainstorming, individual work) will increase the active behavior of students has a positive effect. Educational and methodical manuals, electronic tools, suggestions and recommendations required to increase the effectiveness of biology lessons are analyzed. The importance of this stage is that teacher's active, consistent and systematic approach to the use of ICT is realized in it. Active use of electronic textbooks, electronic manuals and multimedia tools by teachers in class, extracurricular and extracurricular activities will be established. Methodological aspects of the systematic implementation of the planned use of ERV based on the technological map will be developed during the training process. That is, the steps of the introduction,

memorization of past topics, description of a new topic, interconnection of topics, general conclusion, evaluation and control of students are systematically implemented by means of electronic resources.

The third stage - the main stage is characterized by the full application of ETR to biology education. In this, the process of "Integration of modern ETR in biology education" will be started. It involves large-scale interdisciplinary integration, development of individualized education, replacement of electronic methodical materials with quality electronic literature, systematic use of electronic libraries and the Internet within the framework of education.

Unfortunately, at present, the problems of informatization of biology education have not been completely solved. This includes:

- firstly, expanding the database of quality samples of materials and demonstration tools suitable for educational processes organized on the basis of electronic resources;
- secondly, to develop basic and special competencies of teachers and students in organizing lessons based on interactive educational tools;
- and thirdly, it is appropriate to include problems related to the preparation and development of quality samples of electronic software and teaching-methodical tools for the process of organizing in-class, out-of-class and out-of-class activities.

In the course of conducting the research work, in the organization of experimental work carried out in general secondary schools, it was witnessed that many schools have limited access to electronic resources, lack of electronic resource supply, and also the information environment is not up to the level of demand can be. We will get acquainted with such information on the basis of analytical materials in paragraph 1.2 of the study.

The following tasks are recommended to improve the use and efficiency of ETR in biology education in general secondary schools:

1. To develop and implement the use of ETRs in the preparation and use of the teacher's lesson plans, abstracts, technological map of the lesson, distribution materials on the basis of one system;
2. To further increase the quality of presentation of topics in biology, to understand the illustrative and animated realities of the studied object when it is being demonstrated, to establish the permanent use of electronic textbooks and electronic manuals in the lesson;
3. Formation of the skills of individual use of ETRs in the development of students' knowledge and skills in biology lessons and extracurricular activities;
4. Introduction of wide use of ETR tasks in self-monitoring and assessment of students;
5. To strengthen students' theoretical information with practical skills, based on the introduction of electronic educational tools in the form of virtual laboratories, it consists in developing basic and private competencies of students. Scientists within the scope of these scientific problems say that electronic educational resources are of special importance in the deep mastering of many educational subjects by the student, and ultimately, the task set by the teacher serves as an important factor in the achievement of national goals.

In improving the use of electronic educational resources in biology education - the description of the topic, its organization, the use of electronic materials, in lessons, extracurricular and extracurricular activities, enlarging processes that are difficult to see in nature, demonstration on the basis of visibility, thereby animating them in a state close to their naturalness will facilitate the process of student's acceptance of concepts during the study of the object.

When it comes to the introduction of electronic educational resources in the educational process, it will not only affect the effectiveness of the lesson, but also the activity of the teacher and students. At this

point, it is necessary to list the positive indicators that are expected to be produced by teachers during the use of computers in biology classes:

- Biology education is technologicalized with the help of interactive educational tools;
- the topics of the lesson are clear, evident, widely covered;
- provides a high quality level of visualization in biology education;
- in biology education, independent education and group activities, as well as guidance for independent performance of tasks at home, educates the individual activity of the student;
- quickly monitors students' knowledge;
- stimulates student activity;
- student's research skills are formed and developed as a result of acquiring biological knowledge;
- ensures the effectiveness of classroom, extracurricular and extracurricular activities with the help of available electronic educational tools.

This educational process is for the active activity of the student:

- mental activity develops;
- increases his interest in biology;
- at the end of mastering the subjects, the competence of daily self-evaluation and control develops;
- independent learning skills are formed;
- develops the skills of working in active activities in mutual team cooperation.

It is known that there are topics in biology that are difficult to master, and if we say that every student can master them in the classroom at the same time and easily, we are very wrong, because if we take into account the psychological characteristics of the students, the mastery of the topics relies on the ability to effectively use the differentiated educational methods of teaching.

REFERENCES

1. Тихомирова Ю.А. Методика дистанционного обучения биологии в современной школе. Автореферат на соискание диссертации кандидат педагогических наук. Санкт-Петербург. 2014. 149-с.
2. Толипова Ж.О., А.Т.Ғофуров. Биология таълими технологиялари. –Т: Ўқитувчи, 2002. – 128 б.
3. Толипова Ж.О., А.Т.Ғофуров. Биология ўқитиш методикаси. Олий ўқув юртлари талабалари учун дарслик. –Т: “Iqtisod-moliya”. 2007. 236-б.
4. Толипова Ж.О. ва бошқ. Биологияни ўқитишда педагогик технологиялардан фойдаланиш. – Т.: 2005. 1-2 қисмлар.
5. Қарахонова Л.М. Узлуксиз таълимда медиаресурс ва медиавоситалардан фойдаланиш // Узлуксиз таълим // -Тошкент. 2015. № 4. –Б. 59-63.
6. Қарахонова Л.М. Медиационная грамотность и медиаобразование в непрерывном образовании // Узлуксиз таълим // -Тошкент. 2017. № 5. –Б. 52-58.
7. Khujanazarov U.E. Factors Affecting The Status Of Mountain And Mountain Pastures Of Kashkadarya Basin. Natural Volatiles & Essential Oils, 2021; 8(4): 12006-12017.
8. Khujanazarov U.E. Foothill flora of the Kashkadarya basin. Bulletin of Khorezm Ma'mun Academy, 2021. – No.7. – Pp. 93-98.
9. Musaxonovna K. L. General secondary schools requirements for the introduction of informed educational resources for the development of natural sciences //ACADEMICIA: An International Multidisciplinary Research Journal. – 2022. – Т. 12. – №. 5. – С. 855-860.

10. Musakhonovna K. L. Peculiarities of using modern educational tools to increase the effectiveness of teaching the natural sciences and direct students to independent activities //Asian Journal of Multidimensional Research. – 2022. – T. 11. – №. 5. – C. 182-191.
11. Qaraxonova Lobarxon Musaxonovna., & Ximmatov Elmurod Xayitovich, (2023). ISSUES OF IMPROVING TEACHING OF INFORMATION LESSONS TO STUDENTS IN GENERAL SECONDARY SCHOOLS. CURRENT RESEARCH JOURNAL OF PEDAGOGICS, 4(11), 126–131. <https://doi.org/10.37547/pedagogics-crjp-04-11-22>