

## IMPROVING THE METHODOLOGY OF USE OF E-LEARNING RESOURCES IN IMPROVING THE EFFECTIVENESS OF TEACHING “HUMAN ANATOMY AND PHYSIOLOGY “ IN PEDAGOGICAL HIGHER EDUCATIONAL INSTITUTIONS

**Urunova Dilshoda Sobirovna**  
Navoi State Pedagogical Institute  
Teacher of the Department of biology

### ABSTRACT

This article presents information about the use of electronic educational resources in teaching the subject of human anatomy and physiology in pedagogical higher educational institutions.

**Keywords:** E-learning resources, information technologies, education, natural sciences, reproductive, productive, creative.

### INTRODUCTION, LITERATURE REVIEW AND DISCUSSION

Today, in the era when information is globalized, it is considered an urgent problem to achieve the effectiveness of training using e - learning resources in the educational process. The use of electron educational resources in regulatory documents adopted to achieve the effectiveness of the educational process in pedagogical higher educational institutions is defined as an important task. For the use of Information Technology in the teaching of natural sciences, including anatomy and physiology, it is necessary to take into account the peculiarities of the content of biological education. Through the use of e-learning resources in the teaching of anatomy and physiology, it is possible to develop students 'educational motives, organize differentiated learning, control and evaluate students' acquired knowledge, and organize independent and creative research of learners. Teaching anatomy and physiology e-learning resources used at Perform gi tasks below:

1. Educational task-the opportunity arises to give students a comprehensive knowledge of the main and additional materials on the subject to be studied, the main concept and their explanations, various tables, diagrams, experiments of a complex scientific and productive nature.
2. The task of directing the educational activities of students is to work in the medium of educational, modeled and control programs, as well as animations, which are information technology products of students, these programs also bring together the organization and management of students ' cognitive activity, that is, direct students to deep and solid knowledge.
3. Visual function-different from other teaching tools, animations that are products of electron educational resources are incomparable in the teaching process, due to the possibility of moving and dynamic imaging of biological processes by students.
4. The task of control is to control and evaluate the acquired knowledge, skills and qualifications of students in all forms of anatomy and Physiology Education: lesson, extracurricular activities, extracurricular classes, as well as at all stages of the anatomy physiology lesson, carry out the validity, regularity, comprehensiveness, repeatability of control.
5. The task of the developer-the presence of educational tasks in the programs for controlling the acquired knowledge, skills and abilities of students according to the degree of difficulty:

reproductive, productive, partially-exploratory and creative in character will increase the students' desire to complete the tasks of the next stage in accordance with their knowledge, need and interest in the tasks,

6. Educational task-as a result of the work of students with information programs, educational and mental labor skills are developed.

7. The task of developing a scientific worldview is the study of nature and objects in two worlds: macro and microelement, and the science of Biology, in its content, in most cases, develops abstract thinking and scientific worldview, studying through animations of educational materials on the microelements: cell, the process of going in tissues, the structure of the molecule, atom of chemical elements, for example, The establishment and implementation of ways of use in the educational process, taking into account the above-mentioned tasks of e-learning resources in the teaching of anatomy and physiology, is one of the pressing problems of today.

The use of the e-learning resource of the educational science of anatomy and physiology prepares the basis for the implementation of the following didactic goals:

1. Information technology provides the basis for the collection, sorting, didactic processing, distribution and use in the educational process of the educational material, which makes it possible to realize the educational, educational and developmental goals envisaged in the teaching of anatomy and physiology.

2. The trajectory of study, tempo marking in accordance with the existing talent, need, interest and educational motives of each student, allows repeated use of information programs if necessary.

3. Anatomy and physiology radically change the structure of classes, turn the course, character, cognitive activity of students from the object-subject relationship, subject-subject relationship, that is, students are an active participant in the pedagogical process to achieve educational goals.

4. Prepares the ground for the development of independent, creative, logical and systematic thinking skills in students.

5. In cases where it is impossible to carry out at the educational institution (without the necessary equipment, the experiments carried out are harmful to the health of students, long-lasting, the study of the technologies of production enterprises), it makes it possible to virtual demonstration of experiments.

6. It prepares the ground for the growth of creative abilities of students, the activation of educational cognitive activity of students and the acquisition of educational motives.

7. In order to determine the effectiveness of the educational process, feedback occurs, that is, the opportunity to identify and evaluate the acquired knowledge, skills and qualifications of students in a short period of time. One of the important tasks of teachers acting pedagogically in the education of pedagogical oil is considered to be the achievement of students' interests in mastering the basics of science, ensuring their perfection on the basis of the development of independent and creative thinking skills. The products of Information Technology are important in solving these problems. The lessons used in the products of e-learning resources are rich in information, visual, interactive and provide the basis for the efficient use of time, the acquisition of knowledge of each student at their own pace, and the teacher, the opportunity to carry out education in a differentiated and individual way with students, among other things, to control and evaluate their results in teaching.

The following information technology products can be used in the teaching of anatomy and physiology:

1. The implementation of exhibitionism, that is, presentation materials, based on the content of each topic.
2. Animation of biological processes.
3. Virtual laboratory and practical work.
4. Virtual excursion to production enterprises.
5. Modeled program of biological processes.
6. Educational programs of biological processes.
7. Control programs to monitor and evaluate students ' acquired knowledge on topics.
8. Educational and information sites for independent education and work of students.
9. Didactic game-based animations.
10. A program of creative assignments with varying degrees of difficulty. In the teaching of anatomy and physiology, the possibilities of using e-learning resources are huge. Natural tools, like all natural sciences, play an important role in teaching anatomy and physiology, but by placing pictorial tools in computer memory, they can be used in the process of studying the topic.

It is recommended to use information technology for the following purpose:

- I. Exhibition tools, demonstration of multimedia exhibitionism.
- II. Manage the removal of clay to throw students ' cognitive activities through module programs.
- III. Collect additional materials and develop independent work on them.
- IV. Control Programs, Control and evaluation of students ' knowledge through test assignments.
- V. Didactic games, solving puzzles-tasks to meet his need to gain knowledge and develop his interest.

As can be seen from the above points, the harmonious use of not only pedagogical, but also electronic educational resources in the teaching of anatomy and physiology has a high effect, allows students to develop their interests and needs for mastering the basics of science. As a result of the study of electronic textbooks, versions and multimedias, which are products of e-learning resources based on the content of the topic, the teacher's study ladigan, and their analysis, it is necessary to determine the possibilities of implementing the didactic goals of the topic, ways of using educational, modeled and control programs, multimedias. To do this, it is necessary to identify ways to use the products of this e-learning resource in the lessons of anatomy and physiology, to develop ways to organize the student's cognitive activity.

It is known that e - learning resources give the desired effect when used in the educational process in harmony with pedagogical technologies. In this process, in the harmonization of modern pedagogical and Information Technologies, the functions of information technology such as information, organization and management of the student's cognitive activity, exhibitionism, control and evaluation of students 'knowledge, activation and interest of students' cognitive activity are taken as the basis.

In conclusion, the didactic game, which is used at a private methodological level in the teaching of anatomy and physiology, provides opportunities to harmonize in classes the functions of information technologies such as information, organization and management of students 'cognitive activity, exhibitionism, control and evaluation of students' knowledge , activation of students ' cognitive activity and gaining interest.

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