



Ways to Improve Biological Education in Higher Education

Khurshida Pardaeva

Senior Teacher, Jizzakh State Pedagogical Institute

ARTICLE INFO

Published Online:
13 December 2021

Corresponding Author:

Khurshida Pardaeva

ABSTRACT

One of the most pressing issues today is the organization of education, which combines all the components of educational content, traditional teaching, which maintains its dominance in educational institutions, serves as the basis for a systematic approach to the teaching of biological sciences. At the heart of a systematic approach to the teaching of biological sciences is the integration of educational content, teaching methods, tools and forms, and these components of the educational process form a coherent system.

KEYWORDS: Content of Education, Component, Organization of Education, Forms and Methods of Education, Teaching of Biological Sciences.

INTRODUCTION

As the content, goals, and objectives of education expand over time, so do its forms and methods. Today, the main directions of human activity are becoming a holistic system, i.e. technology, which allows to fully achieve the goals of this activity. In the same field of education, pedagogical technology has been introduced in recent years.

In order to apply pedagogical technology in the educational process, it is necessary to create a scientific and practical mechanism. It should be noted that the system (mechanism) that allows us to collect new pedagogical technologies, educational innovations in the country, to test the most effective of them for our work and to introduce them into the educational process not formed.

THE MAIN FINDINGS AND RESULTS

The most pressing issue and task today is to implement educational standards in the educational process. If this task is not fulfilled, the issues of achieving quality and efficiency in the field of education and improving the educational process will remain unresolved.

Based on the above considerations, the goals and objectives for the teaching of biological sciences in higher education institutions are formed from these state and social orders.

In the teaching of biological sciences, the teacher has the following tasks to fulfill these orders:

- Spiritual and moral education of students in the process of biological education, development and introduction of effective forms and methods of educational work;

- Use of innovative and information and communication technologies in the educational process in the biological sciences;

- Accelerate the teaching process in the teaching of biological sciences using a modular system of training;

- Ensuring the humanitarian orientation of biological education based on the rich spiritual and intellectual heritage of the people and universal values;

- Development and implementation of a new generation of syllabus of educational and methodological complexes and didactic support of the process of biological education;

- Development of spiritual and moral qualities of students at all levels and levels of biological education on the basis of the principles of national independence and the rich intellectual heritage of the people and the priority of universal values;

- To inculcate national ideas and ideology in the minds and hearts of students in the process of biological education, to raise the level of ideological education in educational institutions to the current level;

- Ensuring the integrity of students through the integration of education and upbringing in the educational process, improving legal, economic, environmental and sanitary education and upbringing;

- It is necessary to deepen the ideological knowledge of future teachers.

One of the most pressing issues today is the development of textbooks that incorporate all the components of educational content.

Traditional teaching, which retains its dominance in educational institutions today, serves as the basis for a systematic approach to the teaching of biological sciences.

At the heart of a systematic approach to the teaching of biological sciences is the integration of educational content, teaching methods, tools and forms, and these components of the educational process form a single system.

Students will learn that the science of human anatomy and physiology is one of the most important branches of the biological sciences, that the object of study is living organisms, to study the life processes in their individual systems, organs, tissues and cells, to understand their nature and mechanisms. explain the interrelationships of vital processes in the animal body, the discovery of causal connections between events, as well as the identification of their general laws. It is also important to note that physiology is an independent science, the results of which are based on accurate experimental data. It is possible to observe on the example of "animal physiology" and other departments of science. These include providing information about scientists from Central Asia, the CIS, and the world who have made significant contributions to the development of the science, and arousing students' interest in the science.

Physiology (Greek. (physis) - nature, logos - doctrine, science) studies the functions of a living organism, the processes that take place in it. This science broadly studies the vital activity of cells, tissues, organs and structures, the basic mechanisms of all complex and important processes inherent in the whole organism, their functional relationship, depending on the internal and external environmental conditions.

The main tasks of physiology are the study of metabolism, nutrition, respiration, blood circulation, digestion, endocrine glands, nervous system and other organs. Physiology teaches the function of the organism (Latin “funktio” - to perform, function) the function and function of each cell, tissue, organ, structure as a whole organism.

Human physiology is the foundation of medical theory, the development of which is of great importance for pedagogy and psychology. Prolonging human life in the prevention of many human diseases, ensuring normal growth and development, adapting to different environmental conditions, maintaining a clean environment, the organization of labor and sports in a purposeful way relies on the achievements of physiology in solving problems.

It should be noted that the science of physiology constantly provides theoretical food for medicine and serves as its foundation. Medicine, in turn, provides valuable information for physiology. These two areas complement each other and continue to evolve and improve. The services of many scientists who have conducted research in this area are invaluable. Among them are Buqrot (Hippocrates), Aristotle, K. Galen (Jolinus), Abu Nasr Faroobi, Abu Ali ibn Sino, U. Garvey, R. Descartes, E. G. Starling, I.M. Sechenov, I.P. Pavlov, Ch.S. Sherrington, L.A. Orbeli, A.A.

Ukhtomsky, Uzbek scientists E.F. Polyakov, A.Yu. Yunusov, K.R. Rahimov, B.Z.Zaripov, A.S. Sodikov, B.S. Sodikov are among such scientists.

As a result of scientific progress and constant differentiation of sciences, the science of human physiology today also forms a complex, which includes general physiology, evolutionary physiology, normative and pathological physiology, occupational physiology, ecological physiology and others.

It is expedient to further improve the teaching of this subject, to improve the working and model programs, to introduce new pedagogical technologies in the educational process, to make effective use of interactive methods.

The science of human physiology, which is part of the biological sciences, is one of the most important and difficult sciences to master. The study of the functions of living organisms in different conditions is the main goal of physiology and plays an important role in the training of bachelors and masters of biology. It is important for students to understand the physiological processes in the formation of the scientific worldview, the perception of the effect in the body, the processing of received information in the central nervous system, the formation of appropriate responses. In particular, by studying the science of physiology, students gain a comprehensive understanding of the complex functions of the body and gain the knowledge they need to develop biological thinking skills as they grow to become experts in their fields.

At the same time, students practice their theoretical knowledge in the laboratory during the laboratory classes. This will be the basis for their future activities.

Physiology is also an experimental science, and laboratory classes must be experimental.

CONCLUSION

New pedagogical methods such as open and problem-based lessons in the teaching of human physiology, the use of interdisciplinary communication, the use of computer technology, the widespread use of visual methods of teaching, roundtables, the widespread use of situational issues The use of technology will further increase the effectiveness of the lessons.

REFERENCES

1. Adolf Faller., Michael Schuenke-The Human Body - “An Introduction to Structure and Function” Thieme Stuttgart · New York
<http://www.bestmedbook.com/2004>
2. Rajamurodov Z.T., Rajabov A.L. (2010) “Physiology of man and animals”. – Tashkent: Med. Book.
3. Nuriddinov. E.N. (2005) “Human Physiology”. – Tashkent.: “Communicator”.
4. Khudoyberdiev.R.E., I.K.Akhmedov. (1993) “Human Anatomy”. – Tashkent: “Ibn Sina”.

“Ways to Improve Biological Education in Higher Education”

5. Ahmedov.A. (2007) “Human Anatomy”. – Tashkent: “Economics and Finance”.
6. R. Bokhodirov. (2006) “Human Anatomy”. – Tashkent: “Uzbekistan”.
7. I.K. Akhmedov. (1998) “Atlas of human anatomy”. – Tashkent: “Uzb. National Encyclopedia”.
8. F.N. Bohodirov. “Human Anatomy”. – Tashkent: Uzbekistan. 2006 y.
9. Maxmudov.E. (2006) “Vozrastnaya fiziologiya i osnovi gigiyeni”. – Tashkent. Izd. Lit.Fonda sayuza pisateley Ruz.

INTERNET SOURCES

1. www.tdpu.uz
2. www.pedagog.uz
3. www.physiology.ru/handbooks.html
4. www.curator.ru/e-books/b22.html