Methodology of Teaching Biology, Legislative Aspects

Lola Narmatovna Egamberdieva

Candidate of Biological Sciences Chirchik State Pedagogical University

Aziza Khabibullaeva

Biology Education, 3rd year student, Chirchik State Pedagogical University

Abstract: Biological education is of great importance in the life of mankind. The biology teacher must have a deep understanding of the life and work of every person of the biological knowledge, make sure of it and educate this confidence in the students. The profession of a biology teacher requires a high level of knowledge and strong willpower, so that students can absorb why every person needs to learn biology. In this paper, the integrity of the biological education process, teaching printouts and legislation are studied.

Keywords: Education, Science, Biology, Ecology, Biological Education. Plant, Pedagogy, Innovation.

INTRODUCTION

Pedagogy develops according to the laws of development of society. Today, the same process is going to escalate. In particular, the work carried out for the restoration of the legal state is evidence of the rising national consciousness day by day. Since human consciousness does not develop, no change is felt in the spheres of social life. As long as the times are changing at an accelerated pace, it means that pedagogy should be in harmony with these changes.

In modern conditions, according to all the possibilities of the educational process, it is required to develop the personality, socialize and educate in it the abilities of independent, critical, creative thinking. Education, which manifests itself in these opportunities, called personality oriented education.

MAIN PART

The application of various active methods of innovative character in the educational process by the educator, contributes to the development of students, the further development of their abilities. Now, as a result of the development of Science, Technology and innovative technologies, interest in increasing the effectiveness of Education, attention is increasing day by day using interactive methods (innovative pedagogical and information technologies) in the educational process. The training, in which modern technologies are used in the educational system, is aimed at finding the acquired knowledge by young people themselves, independently studying and analyzing them, assessing their knowledge, making the right conclusions.

In the XX-XXI century, science and technology developed. The achievements of biology confidently testify to the fact that mankind has entered a new age - the age of biology. In terms of many achievements in the field of biology, natural sciences are the result of the use of achievements in physics, chemistry, mathematics, astronomy and other sciences [1]. It allows to study at the molecular and submolecular level of the cell, analyzing electron microscopy, spectroscopy, X-ray, based on the achievements and techniques of these sciences. As a result of experiments on the basis of biochemical and Biophysics techniques, the mechanism of metabolism oxyl biosynthesis was revealed, the secrets of photosynthesis were revealed. The material basis of heredity is the structure of DNA and RNA, the function of which is evident, genetic code has been known to enchant. The attention of scientists is focused on determining the essence of life events, developing various methods of managing metabolism, heredity and variability.

A new field of biological science – cosmic biology is expected to answer world-wide questions about the forms of life in the universe, how it spreads and its features, whether there are life signs on other planets or not.

As biology is introduced into the production of achievements in science, biological education for people remains an element of professional preparation. Along with the general technical progress, the requirements

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for their specialties are also increasing. Students feel and master the extreme need to acquire the necessary knowledge for various fields of plant science, fisheries, forestry, livestock, and agriculture.

It can be seen that the education of Biology in secondary school should be of a profession oriented character and it should be associated with the participation of the younger generation in socially useful and productive labour. The work carried out in this direction is carried out in the farmer's farms, in landscaping, in search of new minerals, plants, in the collection of medicinal plants and in other socially useful works [2]. Focusing attention on the practical issues of teaching will help to deepen theoretical knowledge and enable students of schools in relation to nature, agriculture to choose a profession.

Each stage of the development of society puts state and social orders before the educational system. The education system determines its goals and objectives in accordance with these orders.

The independence of the Republic of Uzbekistan, its turn to the world community, the establishment of economic, cultural, educational and diplomatic relations with developed countries demanded the reform of the education system in all spheres. Therefore, in the law of the Republic of Uzbekistan "on education" education is declared as the priority direction in the field of social development of the country.

In this document, the main prints of the state policy in the field of education of our country are as follows:

- 1. The fact that education and education are of a humane, democratic character;
- 2. Continuity and consistency of education;
- 3. The fact that the education system is of a secular character;
- 4. Openness of education for all within the framework of state educational standards;
- 5. Single and differentiated peer to peer selection of educational programs;
- 6. Being educated and encouraging talent;
- 7. Harmonization of public and public administration in the educational system.

It is known that the main printouts of the state policy of our country in the field of Education have a direct impact on the printouts of the functioning of the system of continuous education and are subject to them.

In the national program of Personnel Training of the Republic of Uzbekistan, along with the issues of radical reform of the educational system, tasks before educational institutions, application of the national model of Personnel Training to practice, the following print-outs of continuous education system are noted:

- 1. The priority of education-the effective organization and development of the educational and educational process is the priority direction in our society. The priority of education provides the basis for the formation of a highly spiritual, educated and competent personality with potential.
- 2. The democratization of education is based on the cooperation of the teacher and the educator in the work of teaching and learning styles, in the organization and management of the educational process.
- 3. The humanization of education is based on the complete manifestation of human abilities and the satisfaction of the needs for the acquisition of knowledge, the maintenance of the priority of national and universal values, the harmonization of the interaction of man, society and the environment.
- 4. Socialization of Education. This implies a person's sense of dignity, high spirituality, behavior based on social norms, aesthetic rich worldview, logical and creative thinking.

It is known that educational printouts are a set of knowledge about the structure, essence of the educational system, its laws and regulations, as well as the organization of activities, manifested in the management of practice.

Socio-economic, spiritual and educational changes in the Republic methodological principle of socio-economic development in the process of biological Education, Science, systematism, fundamentalism, consistency, visibility, integration of education and education, consciousness linking theory with practice efficiency, clarity, logical sequence, integration differentiation and individualization of Education, harmonization of teaching in individual and group, the purpose of teaching, the linkage of tools and forms, in addition to the assessment and self-assessment principle, it also showed the need to be applied to such principles as democratization and humanization of education.

When sorting out the content of biology and organizing the educational process is based on the following principles. The principle of science is the study of scientific knowledge, facts, concepts, laws, theories, determined in science in a theoretical and practical way, which is the basis and practical significance of the formation of the scientific worldview of students in the teaching of biology.

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Systematic principle is the study of living organisms as a biological system at various levels of structure and complexity, as well as all the components of the educational process: the purpose, functions, content, methods, tools and forms of teaching is to visualize and use them in the form of a system.

Fundamental principle - is based on the study of basic, base concepts, theories, research methods of biology, the results of research of general scientific and theoretical significance and of universal values.

Consistent principle is the organization of the study of instructional material, taking into account the stages of mastering concepts by students.

Visual principle - refers to the use of natural, pictorial, dispersion, didactic and dynamic materials, display media in the study of the structure and vital processes of living organisms. Unity of education and training principle -provides for the solution to the problems of achieving efficiency in the methodological support and management of the educational process, training and development of students. Mindfulness printing-the effective methods and tools of teaching used in the educational process prepare the ground for the conscious assimilation of knowledge by the students.

Clarity principle is applied in the process of teaching in order to avoid difficulties in mastering the knowledge of the students.

The unit of theory and practice principle - the ways of introducing theoretical knowledge in the context of the subject under study into practice, serves to shed light on its importance in human life, national economy and nature. In all spheres, as is the goal of laws and the result of their implementation in the future, the laws of instruction are considered a logical component of the methodology, reflect the object, external, internal, specific and relative links of the pedagogical process, determine the continuity of the content, methods, tools and forms of the educational process, the organization and management of this process

The national program of training of Personnel, which is considered as the scientific theoretical basis for the reform of the educational process and the introduction of the system of continuous education in the Republic, aims to radically reform the educational sphere, completely get rid of the ideological views and stalagmites left from the past, create a national system of training highly qualified personnel, given the printouts of the study, it was found that it is expedient to apply the following teaching legislation to pedagogical practice in teaching biology

These laws determine the strategy and content of education in the system of continuous education and formulate state and social orders for this system. In the organization of the educational process, the above-mentioned printouts and laws should be in the center of attention of the teacher. The process of teacher training in accordance with state and social orders it is necessary to imagine the goals, the content of education, means of pedagogical communication (teaching aids, methods and forms), forms of activity of teachers and students, ways of organization and control of the educational-cognitive process.

CONCLUSION

Taking into account the above points, the process of teaching includes, in accordance with state and social orders, the objectives, the content of education, the means of pedagogical

communication (teaching aids, methods and forms), the forms of activities of teachers and students, the organization and control of the educational and cognitive process.

REFERENCES:

- 1. Умарова, А. И., & Татаева, Д. А. (2021). Реализация межпредметных связей. использование музыки в образовательном процессе. преподавание биологии. Экономика и социум, (7 (86)), 503-506.
- 2. Татаева, Д. А., & Закиров, Д. У. (2021). Эффекты экологического воспитания в общеобразовательных школах, экскурсия детей к природе. Academic research in educational sciences, 2(12), 1413-1418.
- 3. Закиров, Д. У., Хамроев, Р., & Татаева, Д. (2022). Экологического воспитания в бщеобразовательных школах. *Academic research in educational sciences*, *3*(2), 630-636.
- 4. Татаева, Д. А., & Оразова, Ф. О. (2022). Интегративный подход к развитию экологического воспитания в общеобразовательных школах. *Scientific progress*, *3*(2), 409-412.

ISSN NO: 2771-8840

- 5. Закиров, Д., & Татаева, Р. (2022). Развитие экологических знаний у дошкольников—важный процесс. *Academic research in educational sciences*, *3*(9), 370-375.
- 6. Татаева, Д., Абдужабборов, Ж., & Закиров, Д. У. (2022). Использование схем и таблиц на уроках биологии-эффективных методов усвоения знаний. *Журнал Биологии и Экологии*, 4(3).
- 7. Tataeva, D. A. (2021). Description of the ways of using active methods in biology lessons. *Молодой ученый*, (27), 271-272.
- 8. Gaynutdinov, T., Idrisov, A., Vagin, K., Kurbangaleev, Y., Zakirova, G., Ishmukhametov, K., ... & Smolentsev, S. (2023, January). Study of radiation-thermal damage in white rats. In *E3S Web of Conferences* (Vol. 371, p. 02046).
- 9. Joraboevich, S. A., Akhrolovich, N. R., & Sadriddinovich, S. Z. (2022). Influence of Irrigation Regime and Norms on the Yield of White Cabbage. *International journal of biological engineering and agriculture*, 1(5), 100-105.
- 10. Valentinovich, K. D., Akhralovich, N. R., & Ekaterina, L. (2022). Selection of tomato varieties and hybrids for cultivation in hydroponic greenhouses of Uzbekistan. *European International Journal of Multidisciplinary Research and Management Studies*, 2(10), 207-214.
- 11. Gaynutdinov, T. R., Idrisov, A. M., Vagin, K. N., Kurbangaleev, Y. M., Zakirova, G. S., Ishmukhametov, K. T., ... & Smolentsev, S. Y. (2021). Simulation of radiation-thermal illness and a way to its treatment. *NVEO-NATURAL VOLATILES & ESSENTIAL OILS Journal/NVEO*, 3541-3549.
- 12. Akhrolovich, N. R., Madiyarovich, S. S., & Muradbekovich, A. D. (2021). Determination of Possible Sowing Terms in the Growth of Early, Middle and Late Ripening Varieties of Khorezm Melons. *Annals of the Romanian Society for Cell Biology*, 10175-10190.
- 13. Nizomov, R. A. (2020). Selection of promising varieties of okra (hibiscus esculentus l.) from non-conventional vegetable crops. *ИННОВАЦИОННЫЕ ПОДХОДЫ В СОВРЕМЕННОЙ НАУКЕ*, 1(1), 99-103.
- 14. Ahrolovich, R. N., Urinbaevana, M. H., & Madiyarovich, S. S. (2020). Melon and its environmental characteristics. *Journal of Critical Reviews*, 7(2), 480-490.
- 15. Kushakova, M. N. (2020). Main directions of credit policy during the COVID-19 PANDEMY. European Journal of Molecular & Clinical Medicine, 7(2), 1836-1839.
- 16. Хамракулова, М. М. К., & Коканбаев, И. И. (2022). Билингвальное обучение на уроках химии, как средство повышения качества образования. Oriental renaissance: Innovative, educational, natural and social sciences, 2(1), 780-783.
- 17. Kukanbaev, I. I., & Sheralieva, Y. B. (2021). Using independent work to improve the effectiveness of teaching the topic" Halogens" in the school chemistry course. Asian Journal of Multidimensional Research, 10(4), 172-176.

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