Scientific And Theoretical Basis of Using Personalized Educational Technologies in Biology Teaching

Aripbaev Islambek Muradbaevich

Doctor of Philosophy in Biological Sciences, Associate Professor

Atashov Ajiniyaz Shaniyazovich

Karakalpak State University

Assistant professor of ecology and soil science department

Abstract. This article provides information about the use of personalized educational technologies in biology education, the content and types of personalized technologies. Also, the use of modern teaching technologies, the concept and ideas of pedagogical activities of person-oriented education, and the positive possibilities of introducing person-oriented education in biology lessons are revealed for students

Key words: Person-oriented education, modern educational technologies, teaching biology, educational efficiency, innovative education, intellectual and emotional-motivational development of students, independent and creative thinking.

Introduction. In the 21st century, education on a global scale is recognized as the main factor that ensures sustainable development, and in the new concept of education set by most countries until 2030, the process of "creating the opportunity to receive quality education throughout life" is defined as an urgent task. For this purpose, in our republic, special attention is being paid to the further improvement of the teaching methodology, the gradual application of the principles of individualization to the educational processes, and the introduction of modern information, communication and innovative technologies into the educational system.

To study the existing forms of education in Great Britain, Germany, France, the USA, Russia, Scotland, Finland, South Korea and other countries, to develop methods that meet the complex requirements of the era and education based on their advanced experience. Issues of increasing the effectiveness of education through the introduction of the most modern methods of teaching and information technologies are gaining relevance.

The use of modern teaching technologies makes it possible to make the teaching process uniform and achieve high efficiency.

In this regard, the fact that personal technologies are becoming more relevant today, and that these technologies are the current and future of education, is of particular importance.

In particular, in the fourth priority direction of the Development Strategy of the New Uzbekistan for 2022-2026 of the President of the Republic of Uzbekistan called "Fair social policy management, development of human capital", every citizen should study a specific profession at the expense of the state. to create opportunities, to increase the scope of vocational training by 2 times, to train a total of 1 million unemployed citizens [2].

Implementation of such urgent tasks imposes a huge responsibility on the educational system. In order to increase the quality and efficiency of educational processes and achieve the set goal, the organization of pedagogical activity based on the individual-oriented educational technologies and a systematic approach to it are urgent.

Analysis of literature on the topic (Literature review). S.Bagaeva, A.Bakhmutskyi, I.Belevseva, Ye.V.Bondarevskaya, I.Galmukova, S.V.Kulnevich, A.Makarov from the CIS countries scientists regarding the concept and ideas of pedagogical activity of person-oriented education, A. Mayorov, S. Khokhlova, F.T. Fomenko, I.S. Yakimanskaya and others researched implementation problems.

Research on the issues of management, assessment and control of the quality of education in the studies of S.Anderson, B.Blum, N.Gronlud, L.Hoffmann, L.Kronbach, R.Linn, R.Stigtins, H.Yulek and others from the scientists of distant foreign countries work has been done.

ISSN NO: 2769-996X

Date of Publication: 17-10-2023

https://zienjournals.com Date of Publication: 17-10-2023

B.R.Adizov, B.Mamurov, S.Nishanova, R.G'.Safarova, E.A.Seytkhalilov, K.Hoshimov, F.R.Yuzlikayev, E.Yuzlikayeva and others have done research.

Today, in all general education schools in our country, the effective use of personal educational technologies is of great importance for students to acquire deep knowledge potential and become mature individuals. In particular, through this activity in biology education, students are helped to understand the relationship between nature and society, to form the right relationship to the environment, and to be able to analyze the events and phenomena that occur in nature. will give.

Research methodology. It can be concluded from the above points that the use of person-oriented educational technologies in biology education gives very effective results. For this reason, based on individual-oriented educational technologies in biology classes, taking into account the strategy of thinking and action of students, it leads to the development of their personality, specific characteristics, creative and creative abilities.

This means that the educational environment should be adapted to the student's abilities. According to him, the educational environment, pedagogical conditions, education and upbringing process should fully realize the student's personal potential, develop his abilities, ensure his maturation as a person, his thinking, inquisitiveness and worldview. refers to enrichment.

One of the unique aspects of the introduction of person-oriented education in biology education is to recognize the personality of the learner, to create a comfortable and necessary environment for his comprehensive development.

In the process of biology education, this type of education helps students to develop qualities such as independent work, creativity, creativity, initiative, patriotism, as well as independent and critical thinking skills. In the organization of person-oriented education, a biology teacher is required to approach each student as individually as possible, to respect his personality, to express confidence in him. Also, the participants of the person-oriented education and training process receive knowledge in mutual cooperation in the form of pedagogue-student or student-student, group of students, student-student team, individual represents the need to create a favorable pedagogical environment for development.

The intellectual and emotional-motivational development of students, the formation of knowledge and professional skills, the provision of an approach to the educational process as a value, the increase of activity, the formation of self-awareness and independence are based on the person-oriented technology.

A biology teacher must comply with the following conditions when using person-oriented educational technologies in the educational process:

- to be able to see each student as a separate, unique person;
- respect the student;
- instilling in students a sense of respect for each other;
- ability to correctly assess the student's mental state;
- to have a tolerant attitude towards each student;
- expressing confidence in the student's strength, potential and aspirations;
- to create a comfortable educational environment for them to thoroughly master the science of biology;
- creating an opportunity for students to complete educational tasks and work independently or in small groups;
- teaching students to independently control their activities, to determine the effectiveness of their activities, to analyze the factors of success and the consequences of mistakes;
 - not to harass any student during the educational process;
 - not to exaggerate the shortcomings of individual students;
- if the student's inability to master the subject well, indecent behavior during the educational process is noted, then without making a firm conclusion, determine the reasons for this and, based on the determined reasons, honor and pride of the student to eliminate situations such as his inability to absorb knowledge, indecent behavior without causing harm;
 - to help every student to succeed in education;
 - assessment of the student's specific behavior rather than his personality;
 - as a pedagogue, it is necessary to earn the respect and trust of every student.

ISSN NO: 2769-996X

https://zienjournals.com Date of Publication: 17-10-2023

Analysis and results. In biology lessons, students learn to use personal-oriented educational technologies to develop a creative, critical approach to learning material, to promote new ideas, to justify them, to defend their opinion, to find an effective solution in problem situations, to gain knowledge, will have the opportunity to learn skills, competencies. The use of various active methods of an innovative nature by the teacher, serves to develop students as individuals, to further develop their creative abilities.

In particular, in the teaching of biological science, pedagogues pay special attention to the content of activities aimed at ensuring that educational information can interest students, encourage them to think, and be creative, based on their knowledge, skills, qualifications, and experiences. they need to pay attention.

Today, the following types of person-oriented education are widely used in modern education [5]:

- ✓ creative assignments;
- ✓ tasks requiring a creative approach;
- ✓ problems and problematic situations;
- ✓ didactic, role-playing and business games;
- ✓ discussion, debate;
- \checkmark contests in the form of competitions, etc.

Also, there are the following main types of person-oriented education: innovative education, cooperative education, interactive education, distance education, problem-based education, project education, computer-based education, developmental education. lim, differentiated education, module education, individual education, independent education, software education, game technologies.

Educational processes are successfully implemented through the correct and effective use of all types of this person-oriented education in biology classes. After all, the use of interactive learning technologies and methods from individual-oriented education types is considered one of the most optimal ways to increase the effectiveness of education in the current modern conditions [4].

After all, pedagogic scientists R. Ishmuhamedov, A. Abdugadirov, A. Pardayev say that the qualification of a teacher of an educational institution should have two sides, illuminated by special and pedagogical disciplines, and he always asks: "Why teaching need?", "How to teach?" should find answers to the following questions, should be based on knowledge that takes into account educational characteristics [3].

Therefore, the organization of biological science on the basis of interactive educational technologies, the creation of an interactive process creates a great opportunity for students to master educational materials perfectly and thoroughly.

Organization of biological science teaching based on person-oriented technologies requires reliance on the following basic principles:

- humanitarianism i.e. showing respect and love to a person in every way, helping him, trusting his creative abilities, completely refraining from coercion;
- cooperation i.e. democracy, equality, independent activity in the relationship between teachers and students, i.e. the freedom for a person to choose his life activities within a wide or narrow scope, to produce results not from external influences, but from internal feelings.

The communicative basis of person-oriented technologies is a human-personal approach to the student in the pedagogical process [6]. Therefore, person-centered education is to take into account the personality of the learner, his uniqueness, inner feeling and value, in which the individual ability, experience of each student is developed, and then he coordinated with the educational content. In the implementation of this approach, educational and cognitive processes are mutually coordinated, taking into account the cognitive mechanisms, mental and behavioral characteristics of students, and the teacher-student relationship is based on the principles of cooperation and freedom of choice.

Conclusion/Recommendations. The future of every society is determined by the level of development of the education system, which is an integral part of it and a vital necessity. Today, reforming and improving the continuous education system of our country, which is on the path of independent development, raising it to a new level of quality, introducing advanced pedagogical and information technologies to it, and increasing the effectiveness of education have been raised to the level of state policy. With the adoption of the Law "On

ISSN NO: 2769-996X

Education" in the new version, the basis of modern personnel training through the continuous education system was also improved [1].

From the above, it can be concluded that the use of person-oriented educational technologies in biology education creates an opportunity to increase the interest of students in science, to establish the relationship between nature and humanity.

List Of References

- 1. Oʻzbekiston Respublikasining "Ta'lim toʻgʻrisida"gi Qonuni. Oʻzbekiston Respublikasi Qonun xujjatlari toʻplami, 2020 y., 23-sentyabr.
- 2. Oʻzbekiston Respublikasi Prezidentining 2022-yil 28-yanvardagi "2022–2026 yillarga moʻljallangan Yangi Oʻzbekistonning Taraqqiyot strategiyasi toʻgʻrisida" gi PF-60-sonli Farmoni.
- 3. Ishmuhamedov R., Abduqodirov A., Pardaev A. Ta'limda innovatsion texnologiyalar(ta'lim muassasalari pedagog-o'qituvchilari uchun amaliy tavsiyalar). T.: Iste'dod 2008. 87 bet.
- 4. Axunova G.N., Golish L.V., Fayzullayeva D.M. Pedagogik texnologiyalarni loyihalashtirish va rejalashtirish. / B.Yu.Xodiyev tahriri ostida. T.: «Iqtisodiyot», 2009.
- 5. Хохлова С. Мониторинг качества школного образования: Дис. канд. пед. наук. Тюмен, 2003.
- 6. Крюкова Е.А. Личностно-развивающие образователные технологии: природа, проектирование, реализатсия. Волгоград: «Перемена», 1999. -С. 196.
- 7. Митина Л.М. Личностное и профессионалное развитие человека в нових социалних условиях. // Журнал «Вопроси психологии», М., 1997, № 4. -С. 28-38.

ISSN NO: 2769-996X

Date of Publication: 17-10-2023