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# THE METHOD OF USING COOPERATIVE TEACHING **TECHNOLOGY IN THE DEVELOPMENT OF STUDENT'S BIOLOGICAL COMPETENCIES BASED ON A SYNERGISTIC APPROACH**

Sharipova Dildora Rajabovna Teacher At The Department Of Biology At Navoi State Pedagogical Institute, Uzbekistan

#### **ABSTRACT**

The article describes the method of using collaborative learning technology in the development of biological competencies of students based on a synergistic approach to teaching biology.

**KEYWORDS**: Synergetic approach, cooperative learning technology, team learning, "saw" or "zig-zag" method, work in small groups, "learning together" method, training, education of students' cognitive activity.

### **INTRODUCTION**

Today, improving the cognitive potential of students in the field of education of our republic, integrating advanced foreign experiments, scientific research and modern technologies into the process of continuing education, the formation of cognitive activity through a synergistic approach, the cultivation of knowledge, skills and abilities of students is one of the current tasks of today.

Indeed, in the era when information is globalized, it is considered an urgent problem to achieve the effectiveness of teaching using pedagogical and information technologies in the educational process. In order to use modern technologies in the teaching of natural sciences, including biology, it is necessary to take into account the specific special layers of the content of biological education. Through the use of collaborative teaching technologies based on a synergistic approach to teaching biology, it is possible to develop student's learning motives, control and evaluate student's acquired knowledge, and organize independent and creative research of learners.

### **DISCUSSION AND RESULTS**

Lessons using a small-group teaching method of "collaborative teaching" technology based on a synergistic approach include a biology teacher explaining difficult topics to be mastered by students, providing that factual and additional learning materials are independently mastered by students, a source of information for a specific part of the topic, organization and management of students ' cognitive activity, exhibitionism, control and evaluation of, it can perform functions of students such as activating cognitive activity and gaining interest.

Since the synergistic approach - based collaborative teaching technology is intended to organize the educational process in which students are allocated to the team in the lessons used, it should plan to implement such functions as information source of Information Technology, Organization and management of student's cognitive activity, visual malic, control and evaluation of student's knowledge, activation and interest of students ' cognitive activity. To do this, the biology teacher must place the educational tasks and content of the topic





performed by students during the lesson in computer memory, program the teaching tasks during the lesson and the sequential display of the content in accordance with it.

In classes using the "saw" or "zig-zag" method of collaborative teaching based on a synergistic approach, students are divided into groups twice, i.e. first, "experts" are trained for a certain part of the topic, and then the "experts meeting" group due to its organization, it is not possible to implement the function of organizing and managing student's cognitive activities of information technologies, but it is a source of information, visualization, control and evaluation of students' knowledge, activation of student's cognitive activities and interest it is possible to perform functions such as acquisition.

In lessons based on the method of organizing creative research in small groups of cooperative teaching technology, information sources of information technologies, organization and management of students' cognitive activities, demonstration, control and evaluation of student's knowledge, activation of student's cognitive activities and In addition to the functions of increasing interest, students have the opportunity to master the operations of mental activity necessary for their creative search.

In the classes using the cooperative teaching technology "We will study together" based on the synergistic approach, the content of the subject is divided into parts, students are divided into groups, each member of the group learns a certain part of the subject, and during the lesson, the members of the group are united. Since it is envisaged that the content of the subject will be developed as a whole, information technologies cannot perform the function of organizing and managing student's cognitive activities, but the source of information, demonstration, control and evaluation of student's knowledge, students' it is possible to implement functions such as activating cognitive activity and increasing interest.

## **CONCLUSION**

When organizing classes on the basis of a synergistic approach, it is advisable for the teacher to follow the principle of continuity of educational content, teaching methods and tools developed in didactics, determine from the beginning of the school year what type of pedagogical technologies will be used in the educational-methodological complex and thematic plan, compiled in the sciences. Collaborative teaching on the basis of a synergistic approach to teaching biology the use of technology serves to make students work independently , think creatively and gain educational effectiveness.

## REFERENCES

- **1.** J.O.Tolipova "Biologiyani o`qitishda innovatsion texnologiyalar" Pedagogika oliy o`quv yurti talabalari uchun darslik. Toshkent "Cho`lpon" 2011 y.
- М.Н.Ибодова Биологияни ўқитишнинг интерфаол ва муаммоли изланиш методлари. Педагог журнали 11.07.2022 й
- **3.** М.Н.Ибодова Pedagogical Conditi ons of Developing Self-Studu Working Skills with Textbook book for School children.Eastern European Scientific Journa. Germany, 2018г. № 2.(13.00.00, №1).Р. 295-297.
- **4.** M. N. Ibodova . Effectiveness of independent work in the educational process. Academicia An International Multidisciplinary Research Journal. 10.10.2021r.



#### Page No: - 66-68

- 5. M. N. Ibodova Akademik litseylarda biologiya fanini o'qitishninh interfaol va muammoli izlanish metodlaridan foydalanish texnologiyasi Oriental Renaissance: Innovative, educational, natural and social sciences (E)ISSN:2181-1784 www.oriens.uz SJIF 2023 = 6.131 / ASI Factor = 1.7 3(4/2), April, 2023
- **6.** M. N. Ibodova Conceptual framework for the use of integrative technologies for teaching biological sciences in academic lyceums. European Journal of Research and Reflection in Educational Sciences Vol. 11 No. 4, 2023 ISSN 2056-5852
- **7.** M. N. Ibodova . Effectiveness of independent work in the educational process. Academicia An International Multidisciplinary Research Journal. 10.10.2021r.
- M. N. Ibodova .Conceptual framework for the use of integrative technologies for teaching biological sciences in academic lyceum . Suropean Journal of Research and Reflection in Educational Sciences, 11 (4), (2023). https://www.idpublications.org/ejrres-vol-11-no-4-2023/

