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Annatotsion: the article reflects on the emergence and penetration of interdisciplinary integration into the sciences, including biology, as well as its results. After applying interdisciplinary integration of the Biological Sciences, the achievements of science are also covered by disadvantages. The role of interdisciplinary integration in Biological Sciences today is also highlighted.

Keywords: nationwide program, interdisciplinary linkage, interactive methods, advantages and disadvantages of interactive methods, suggestions and recommendations, differentiation, integration, genetics, evolutionary doctrine.

In the process of radical reform of the educational system in terms of improving the quality of education, the implementation of interdisciplinary ties is even rising to the level of Public Policy. In this regard, a number of laws and resolutions have been adopted by our government. In Particular, Our President Sh.M.The adoption by Mirziyoyev on August 12, 2020 of the decision "on measures to increase the quality of continuing education in the areas of Chemistry and biology and the effectiveness of science" is considered a practical proof of our above opinion. This is the first step towards progressive updates in the continuing education system[1].

The form and content of National Education is high in the cultivation of young people as specialists who can meet the requirements of the Times. It encourages the organization of the educational process on the basis of independent learning in modern ways, in new ways. The general program shows the fundamental reform of education: the introduction of advanced pedagogical technologies; advanced pedagogical technologies of education, the creation of modern educational and methodological complexes and the dependence on didactic provision of the educational process. Special attention is paid to the fact that the innovative approach in educational institutions in our republic, the widespread use of modern pedagogical and information technologies, relying on active and interactive methods and interdisciplinary connections, is aimed at the personality of the student. Especially the issue of inextricable dependence in the Natural Sciences puts a lot of responsibility on the teacher. In teaching biology in secondary schools, it is good to interest Volume. **7**, Issue 0**6**, June (2024)

students in science, to use physical, chemical concepts, physical laws in the provision of biological knowledge, interacting with other subjects, on the basis of specificity of Classes[3]. Physics and chemistry classes in the Natural Sciences Katori study natural phenomena. In order to form a whole of knowledge on the basis of a single object of nature, it is crossed with biology, physics, chemistry, among other sciences.

Over time, science, of course, undergoes some qualitative changes. It increases in size, branches and becomes more complicated. Its true history is much more chaotic and partly ambiguous to interpret. However, many discoveries, hypotheses, concepts contain a certain regularity, the formation of theories and the law of change - the logic of the development of knowledge. Determining logic in the development of science is considered important in understanding the laws of cognitive development, the forces that move it, their history. Previously, in science, it was believed that knowledge is constantly growing, new discoveries are accumulated and more specific theories are put forward. Today, the logic of the formation of science is presented in a different way. Today there are at least 15 thousand different disciplines in science. The complexity of the structure of knowledge depends on several reasons. First of all, the basis of modern science is an analytical approach to real phenomena. In other words, the basic technique is to divide the phenomenon into its simplest elements[4].

Tasks of teaching the educational science of biology - introducing basic biological concepts, theories and laws, providing information on mechanisms for the emergence of adaptations to the living environment of living organisms, introducing biology to the education of the current content of individual and historical development of organisms, introducing the main stages of biology, ensuring that the content of biology education is connected with current social life and technical achievements of science, , particular attention is paid to the absorption of the gualities of a rational attitude towards nature and all its riches into the minds of the younger generation, the local plant and animal species on the ground of biological knowledge, selection achievements, the great allomas and innavational approach that lived and created in kadm, the widespread use of modern pedagogical and information technologies, relying on active and. In particular, the issue of inextricable dependence in the Natural Sciences puts a lot of responsibility before its teaching. Because the subject that the biology teacher is going through is related to chemistry, it requires the teacher to be immersed in Chemistry[2]. We set ourselves the goal of creating all the opportunities and conditions for our children not only to grow up physically and spiritually healthy, but also to become harmonious generations with the most modern intellectual knowledge, harmoniously developed people, fully meeting the requirements of the 21st century. To this end, in order to improve the effectiveness of education, to be in the educational center of the individual and to ensure independent knowledge of young people, in addition to being well prepared for educational institutions and firmly acquiring knowledge in their field, modern pedagogical technologies and interactive methods, teachers who know the rules for their use in the organization of Volume. **7**, Issue 0**6**, June (2024)

educational and educational To do this, it is necessary to arm all science teachers with new pedagogical technologies and interactive methods and continuously improve the skills of applying the knowledge acquired by them in educational and educational activities. In order to ensure the continuity of biological education in Uzbekistan and to master it in depth, it is inevitable that the teacher will face some problems in the process of training.

1. The problem of fully involving all students in the course process, since students can fully participate in the lesson, but no one can fully guarantee that all students in the lesson will be able to understand, it is in this place that the main importance of what pedagogical technologies the teacher uses in the lesson.

2. In the lesson, it is possible that the student understands, answers the teacher's question, but to imagine understanding certain biological processes, to what extent he acquires the qualifications to be able to use this knowledge when faced during his life, remains abstract for the teacher as well. In solving such a problem, extracurricular activities, circle training are considered a matter, and examples are of great importance in working. When interactive methods are used in the course of the lesson, activation of all participants is observed. In this, students exchange ideas and work cooperatively. The table below gives characteristics that make the interactive method different from the passive and active methods (Table 1).

Table 1

Passive method	Active method	Interactive method
Subect-object, that is,	The teacher who	Subect-subect
the teacher speaks,	manages the subect -	relation. The teacher
explains, the student	subect teacher will ask	organizes, manages. On
listens, answers if he asks	questions, the students	the questions and
	will answer individually. By	assignments asked,
	data given	students work together,
		independently,
		concentrate, articulate,
		defend their thoughts.
		Work together. Interests
		increase

And before the teacher who wants to conduct an integrated lesson, there are several problems. All school subjects have their own integration potential, depending on many conditions that must be taken into account when planning an integrated course or course. First of all, the level of education of students of a particular class is analyzed. Difficulties in their educational activities can also be one of the reasons for the use of the integration method. Sometimes the successful study of one subject by schoolchildren largely depends on the presence of certain knowledge and skills in another. An integrated lesson requires additional training, great knowledge and high professionalism from the teacher[5].

Volume. **7**, Issue 0**6**, June (2024)

In conclusion, it can be said that interdisciplinary integration serves as a foundation in the formation of students ' interests, aspirations for science. Because interdisciplinary integration shows that the role of other disciplines within the framework of one discipline is also important, to some extent the role of other disciplines in this discipline. Knowledge of other disciplines through the science of biology can also be acquired due to the integration of Sciences. Therefore, the relevance of the effective use of integration in the development of education is becoming an important task. It is also important to create an integrative approach technology in biology classes to study the problem both theoretically and practically. The task of determining the effectiveness result of the technology of the integrative approach in biological education, the development of appropriate methodological recommendations was also introduced. If a holistic pedagogical system of an integrative approach is developed in biological education; the creation of interdisciplinary integration technology based on the integrative approach of biological education makes it possible to achieve efficiency in the learning process.

LITERATURE USED:

1. The decision of the president of the Republic of Uzbekistan dated August 12, 2020 "on measures to improve the quality of Continuing Education and the effectiveness of Science in the areas of Chemistry and biology". // uz / oz / documents /Chemie-cabiology-y-slashes-continuous-training-quality-and-12-08-2020 Materials of the scientific and Practical Conference" current problems of Biological Science " Andijan: may 2017;

2. Caidahmedova N.S. New pedagogical technologies-T.: Finance, 2003

3. Talipova J.O. " Innovative technologies in the teaching of biology " T: Tdpu named after Nizami, 2014 .

4. Norbo"tayev X.B. "Improving the forms and methods of developing ecological thinking of Biology in natural interdisciplinary synchronous-asynchronous learning" Tashkent-2019

5. B.B.Abdraimova, H.Olimov "Innovatista" limningo " zigaxosciences "Garmonichno razvitoe pokolenie-uslovie stabilnogo razvitiya, blagopoluchiya I prosvetaniya obtshestva" Sbornik nauchno-metodicheskix statey " pp. 4-5, 2014.