

Possibilities Of Training Of Future Biology Teachers For Professional-Pedagogical Activity On The Basis Of Competent Approach

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Abstract – The article explores the pedagogical possibilities of preparing future biology teachers for professional and pedagogical activities - communicative, information work based on a competency-based approach, self-development of teachers as individuals, general (biological) competencies and an innovative approach to build a healthy lifestyle and environmental competencies. Ways to implement a comprehensive approach to modeling on the basis of a combination of innovative and information technologies, interactive teaching methods and tools that allow to describe the object of study in the educational process, the various stages of the process and to effectively use the opportunity to solve problems.

Keywords – The content of biology in secondary schools, its forms, methods, tools, professional pedagogical activity, self-development of teachers as individuals, basic competence, communicative competence, information competence, general (biological) competencies and healthy lifestyle and environmental competencies, innovative technologies, integration of interactive teaching methods and tools.

I. INTRODUCTION

The Action Strategy for the further development of the Republic of Uzbekistan for 2017-2021 sets as a priority "Organization of the educational process in higher education institutions in an innovative educational environment using new methods and tools." As a result, it is even more important to create an environment for the integration of pedagogical and information technologies as an e-learning environment and to improve the methodological system of training biology teachers. Resolution of the President of Uzbekistan dated February 27, 2020 "On measures to further develop the field of pedagogical education." In the ИК-4623 resolution, in the new edition of ЎПҚ-637 23.09.2020 the Law on Education provides for the training of professional teachers with the skills to use modern pedagogical and information technologies in the educational process, improving the quality of education by ensuring the integration of education, science and industry, training competitive personnel, effective organization of scientific and innovative activities. One of the main goals is the introduction of digital technologies, the continuous integration of pedagogical and technical knowledge, as well as the continuous development of professional skills of teachers. At the heart of the ongoing reforms in the field of education in our society, special attention is paid to the issues of radical reform of education, training of qualified personnel and improving their professional skills at the level of developed democracies, meeting high spiritual and moral requirements. Knowledge of the laws of teaching, processes, principles and laws related to the basics of biological sciences allows the teacher to organize and manage the educational processes related to the school biology course in accordance with modern requirements.

II. MATERIALS AND METHODS

In the development of professional and pedagogical activity of future biology teachers, the content of biological sciences, its interrelated introduction of forms, methods and tools of teaching is important. In particular, the content of biology allows to manage the goals of biology teaching on the basis of innovative education and defines the following tasks:

1. Determining the role of the subject in the teaching and education of students;
2. Determining the content of academic subjects in accordance with the age of students, the sequence of learning topics in it;
3. Identify ways to organize teaching on the basis of innovative educational technologies, taking into account the specifics of the biological sciences, and develop project forms of teaching;
4. Identify the equipment related to the content of science (designation of natural, formal, dynamic, audio, video) and their effective use, which is necessary for the composition of biological knowledge, skills and abilities;
5. Provide methodological support for the formation of biology reading room, living corner, experimental land areas and the formation of practical skills that should be studied in front of teachers;
6. The choice of technologies (vitagen, health education, development of health culture and reflexive educational technologies) based on the formation of healthy lifestyle skills in students in the educational process related to the teaching of biology.

It is now becoming clear that it is not enough for students to acquire knowledge, skills and competencies in their subjects. That is, some students who successfully graduate from an educational institution face many failures in life. Although a young specialist who has graduated from a higher education institution and has a new job at a university or institute has acquired sufficient professional knowledge and skills, his/her adaptation to the workplace will take a long time. There is a need to create and apply them in the educational process.

The main purpose of teaching biology in general secondary schools is to form in students the biological knowledge, skills and competencies standardized by DTS. One of the main problems in teaching biology is the formation of knowledge, skills and competencies in students, which is a key component of the content of education.

Biological knowledge consists of scientifically defined concepts about the important signs and properties of existing objects and phenomena, processes and the connections between them. These concepts, in turn, prepare the basis for the conscious acquisition of knowledge by students of the content, methods and tools of preparation of future biology teachers for professional pedagogical activity.

III. RESULTS

There is an opportunity to develop the professional pedagogical activity of future biology teachers, self-development of teachers as individuals, basic competence, communicative competence, information processing competence, general (biology) competencies and healthy lifestyle and ecological competencies. will be the pedagogical basis for development.

The future biology teacher will be able to master oral and written speech in biology classes, which will be necessary for future communication in society, to create questions in a logical sequence based on the text in textbooks and additional literature, to write written and oral answers to questions, to write oral and oral answers to questions. to be able to follow the norms of the culture of communication in communication, to defend and persuade their opinion on the basis of the acquired knowledge, skills and abilities, to create educational debates organized in lessons.

The following teaching work skills, standardized by the DTS in the subject of biology in general secondary schools, will be the basis for the formation of communicative competence in teachers:

Skills of working with the textbook: know and apply the instructions given in the introductory part of the textbook; distinguish color-coded phrases; target based on the content of the textbook; know and use symbols and basic signals; know how to use footnotes;

Skills to work on the text: to plan the read text; to find answers to questions using the text; to write a lecture using the text; to be able to perform practical tasks using the textbook text; to make tables, diagrams, schemes using the textbook text; ; compile a description of the object, draw conclusions.

Teachers are encouraged to use innovative technologies in the teaching process to build the above-mentioned learning skills. It should be noted that in biology classes, didactic game technology conference, press conference, game exercises, collaborative learning technology in small groups, team teaching, "Saw" or Zigzag, Reading Together, Problem-Based Learning Techniques, Brainstorming, and Case Study allow teachers to develop communicative competencies while building knowledge, skills, and competencies.

In order to develop the competence of biology teachers to work with information, to use educational and video films on the subject, to select information from additional literature and Internet sites, to expand their scientific outlook by giving assignments to teachers to prepare abstracts, reports and presentations, extracurricular activities, make effective and appropriate use of field trips and extracurricular activities [2,3].

Biology teachers should focus on teachers' independent work and education in order to build their self-development competencies as individuals, create a database of standard and non-standard teaching and test assignments on topics for teachers' self-assessment, convert them into adaptive test assignments by placing them in computer memory, and It is necessary to focus on the achievement of physical, spiritual, mental and intellectual maturity in the moments of spirituality spent with [4]. This allows the use of student-centered technologies to build teachers' competencies for self-development as individuals.

Respecting the worldview, religious beliefs, traditions and ceremonies of others, preserving the historical, spiritual and cultural heritage of the people, by instilling national universal values in the minds and hearts of students in the teaching of biology to form general (biological) competencies and healthy lifestyles and ecological competencies. a methodological system for the formation of healthy lifestyle skills based on cultural norms in dressing and walking has been identified. This methodological system includes vitagen skills based on the development of medical hygienic skills of students in the context of biological education. [4]

IV. DISCUSSION

The content, goals and objectives of the methods of teaching biology and design disciplines play an important role in the preparation of future biology teachers for professional and pedagogical activities. In particular, the content and structure of biological education on the basis of a competent approach to the development of professional and pedagogical activities of future biology teachers, modern problems, opportunities to update the content of biological education on the basis of approaches will be introduced. Issues such as the characteristics, levels of innovative activities of a biology teacher, ways of organizing and managing students' learning activities, individual approach to students, such as differences, are important. Organizing and managing students' learning activities in biology classes, laboratory and practical classes, extracurricular activities and extracurricular activities in an innovative environment, students' ability to organize and manage independent learning activities, independent and creative, critical-analytical thinking, various will have the necessary skills to analyze pedagogical situations and choose an alternative way out of them, to learn and apply best practices, to design processes for the implementation of innovative activities.

V. CONCLUSION

The problem of developing the professional and pedagogical activity of future biology teachers has been widely studied in foreign and national pedagogy, which is based on different theories, concepts, approaches, positions, directions. There are also opportunities to develop the professional and pedagogical competence of biology teachers on the basis of innovative technologies, which will lay the foundation for increasing their pedagogical potential.

CONFESSION

Recognizes the high relevance of modern approaches to the development of professional and pedagogical activities of future biology teachers, the effective use of innovative technologies, strives to implement them, taking into account the latest achievements of science. In this regard, it should be noted that one of the most important aspects of young professionals to start their professional careers is professionalism.

RECOMMENDATIONS

Use of innovative educational environment in preparation of future biology teachers for professional and pedagogical activity on the basis of competence. Thorough mastering of biological concepts. should create.

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