



International Conference on Scientific Research in Natural and Social Sciences

Hosted online from New York, USA

Website: econfseries.com

2nd December, 2025

PEDAGOGICAL CONDITIONS FOR THE DEVELOPMENT OF BIOLOGICAL COMPETENCE OF STUDENTS

M. S. Rabbimova,

Base doctoral student at Navoi State University

Annotation

This article analyzes the views of scholars on the concept of a pedagogical condition. Pedagogical conditions for the development of students' biological competence are also proposed.

Keywords: my teacher is required, digital technology, design, web platform, motivation, competence.

Today, due to the widespread introduction of digital technologies into the educational process, there is a need to revise the pedagogical conditions for the development of students' professional competence, including biological competence.

Because pedagogical conditions act as a set of factors that allow achieving didactic goals [1]. Also, the concept of a pedagogical condition is multifaceted and has different interpretations:

- 1) the environment in which something occurs;
- 2) a situation that depends on something;
- 3) rules introduced in a specific field of activity.

Pedagogical conditions imply the ability to develop by changing flexibility, dynamics, the composition of elements, the nature of interaction between them, depending on the change in the goals and objectives of the pedagogical process.

In this regard, Y.Y.Grabko emphasizes that pedagogical conditions serve as a set of factors that allow achieving didactic goals. The structure of the set of pedagogical conditions implies flexibility, dynamism, the ability to develop by changing the composition of elements and the nature of interaction between them depending on the change in the goals and objectives of the pedagogical process. Complexity takes into account the interaction and interdependence of conditions[2]. According to U.M. Mirsanov, pedagogical conditions are a set of specially substantiated,



E CONF SERIES



International Conference on Scientific Research in Natural and Social Sciences

Hosted online from New York, USA

Website: econfseries.com

2nd December, 2025

organized conditions and directions of pedagogical activity that determine the educational process, achieving educational effectiveness at various stages and in general [3].

In our opinion, the most complete and accurate definition of the concept of "pedagogical condition" should be based on the definition of U.M. Mirsanov.

Based on the given definitions, we present our own interpretation of this concept. Consequently, the pedagogical conditions in our research are the use of digital educational technologies in the development of biological competence of students studying in higher educational institutions.

Therefore, in the context of digitalization of the educational process, it is necessary to revise the pedagogical conditions for the development of students' biological competence. Therefore, in the proposed research, the pedagogical conditions for the development of students' biological competence were clarified:

- creation of an educational platform that increases the motivation of students in the subject of biology;
- use of foreign web platforms in the design of biology lessons;
- development of mechanisms for the effective use of web-oriented virtual laboratories;
- use of web platforms in the organization of independent study and work of students in biology;
- improvement of the mechanisms for using web platforms in assessing students' knowledge of biology.

These pedagogical conditions are aimed at the implementation of the following tasks:

- increasing the motivation of students and developing the ability for self-education and independent learning;
- formation of students as active subjects;
- targeted and effective use of the capabilities of the global network in students' free time.

Each of these conditions influences the development of the learner's personal qualities to a certain extent and regulates the external (organizational) side of the



E CONF SERIES



International Conference on Scientific Research in Natural and Social Sciences

Hosted online from New York, USA

Website: econfseries.com

2nd December, 2025

process. Therefore, in the development of students' biological competence, along with existing pedagogical conditions, it is necessary to adhere to the pedagogical conditions proposed within the framework of the study. The proposed pedagogical conditions are effective due to the fact that they are aimed at the use of digital technologies, including web platforms, in the organization of the process of biology education and upbringing.

References

1. Павлов С.Н. Организационно-педагогические условия формирования общественного мнения органами местного самоуправления // Диссертация на соискание ученой степени кандидата педагогических наук. –М. 1999. – 160 с.
2. Грабко Е.Ю. подготовка преподавателей вуза к применению технологий дистанционного обучения // Диссертация на соискание ученой степени кандидата педагогических наук. – Чебоксары, 2015. – 185 с.
3. Mirsanov U. M. Uzluksiz ta'lim tizimida dasturlash texnologiyalarini o'qitish metodikasini takomillashtirish // Pedagogika fanlari doktori (DSc) ilmiy darajasini olish uchun tayyorlangan dissertatsiya. – Navoiy, 2023. – 332 b.