

**INTERDISCIPLINARY INTEGRATION OF TEACHING THE SUBJECT "INFORMATION  
TEACHING METHODOLOGY" IN HIGHER EDUCATION**

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**ABSTRACT**

This article discusses the model of interdisciplinary connection and the use of innovative technologies in the educational process and the laws of interdisciplinary connection in teaching the subject "Application of Information Technologies in Professional Activities" in the higher education system.

**Keywords:** Innovation, "Informatics teaching methodology", interdisciplinary connection, modular teaching, interactive methods.

**OLIV TA'LIMDA "INFORMATIKA O'QITISH METODIKASI" FANINI O'QITISHNING  
FANLARARO INTEGRATSIYALASHUVI**

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**Annotatsiya:**

Ushbu maqolada oliy ta'lim tizimida "Axborot texnologiyalarini kasbiy faoliyatda qo'llash" fanlarini o'qitishda fanlararo aloqadorlik va innovatsion texnologiyalarni ta'lim jarayonida qo'llash va *fanlararo aloqadorlik qonuniyatlaridan foydalanish modeli haqida yoritigan.*

**Kalit so'zlar:** innovatsiya, «*Informatika o'qitish metodikasi*», fanlararo aloqadorlik, modulli o'qitish, interfaol usullar.

## INTRODUCTION

Interest and attention to the use of interdisciplinary connections, innovative technologies, pedagogical and information technologies in the educational process is growing day by day. Interdisciplinary integration in modern education aims to create convenience for students by connecting different disciplines and areas. These integration methods require students to study different disciplines together, expand their understanding and develop their thinking through integration into issues and problems. These methods combine skills for students and strengthen their knowledge and skills. Integration (from the Latin word *integratio* - restoration, completion, integer - whole). This word has its function in several meanings. However, its place in pedagogical education is highlighted in the sense of a concept denoting the process of convergence and interaction of disciplines. The word integration is also used in conjunction with the word differentiation. Integration is closely related to differentiation. These processes are reflected in the search for methods for building a system of educational disciplines and generalizing the knowledge of young people. Differentiation is understood as the division, separation of the whole into its constituent elements.

One of the reasons for this is that while in traditional education students were taught only to acquire ready-made knowledge, modern technologies teach them to search for the knowledge they acquire themselves, to independently study and analyze it, and even to draw conclusions on their own.

The studies of N.B. Gafurov, I.D. Zvereva, A.V. Usova and others, who considered interdisciplinary communication to be a didactic condition and tool for activating students' educational activities, deeper and more comprehensive mastering of the foundations of science in educational institutions, independent knowledge acquisition, and the formation of understanding, contributed to the study of this problem. [1,22]

One of such approaches is the teaching of the subject "Application of Information Technologies in Professional Activities" based on the principles of interdisciplinary communication. Due to the importance of interdisciplinary communication in increasing the level of knowledge of students, the creation of a didactic model of integrative teaching of specialized subjects increases the quality of training of future specialists.

A number of studies have been conducted to study the role of interdisciplinary communication in improving the quality of training future specialists, and a comprehensive analysis of the problem of interdisciplinary communication, a consistent didactic system for using the principles of interdisciplinary communication have not been developed. Interdisciplinary communication creates a basis for broadening the worldview based on understanding the objective existing connections between scientific fields, which forms a complete picture of students' future professional activities and develops dialectical thinking aimed at independent knowledge acquisition throughout their lives and careers.

With this approach to education, students' knowledge and skills are manifested in future activities only in purely subject forms - physical, chemical, biological, mathematical, technical, etc. Based on the results of observations and research, a model for using interdisciplinary communication is recommended:

- formation of a complete picture of students' future professional activities through the transfer of knowledge from one discipline to another;

- organization of modular training in the process of teaching special subjects through interdisciplinary communication;

- ensuring the validity of the process of independent learning, in which dialectical thinking and reflection are considered the main mechanisms of interdisciplinary communication.[2,14]

Based on the above requirements, the model of using interdisciplinary communication can be recommended as follows. The main goal of the proposed model is to improve the quality of training of future specialists based on interdisciplinary communication. The model of using interdisciplinary communication describes the establishment of this activity by ensuring the quality of training of students and, as a result, the development of independent education of the future specialist throughout his life.

With the help of interdisciplinary communication, concepts in special subjects increase, students' worldview expands, and a complete picture of professional activity is formed. The motivational block includes internal and external components, which perform 4 functions. These are the goal-setting function, organizational, educational and communicative functions. The module's educational quality improvement block analyzes the activity of internal and external components, the level of general cultural and general professional competencies, as well as the results of model work. It is also important to note that the internal and external components of the model of using interdisciplinary connections are reinforced by a number of functions.

The separate indication of the goal-setting function in student activities is justified by the development of educational content, forms and means that consider the interdisciplinary use of knowledge.

The methodological block consists of the following:

1. Active forms of teaching, such as discussion, training, didactic and creative games, brainstorming.
2. Interactive methods - collective thinking activities (project activities).
3. Modular training.

This block is aimed at developing general cultural (organizational, communicative, reflexive) and general professional (social-professional, special professional) competencies of future specialists. Thus, a systematic and active approach to studying the complex didactic problem of interdisciplinary communication ensures the versatility of the functions performed by students in the educational process, and the multifaceted nature of interdisciplinary communication, which in turn improves the quality of specialist training in vocational colleges. In conclusion, it can be said that interdisciplinary integration is the process of combining or connecting different disciplines. This allows the creation of new knowledge and technologies by connecting knowledge and information from different fields in the environment. Interdisciplinary integration is important for studying the interconnections of mathematics, physics, chemistry, biology, engineering, computer science and other fields. As a result of this process, students' understanding expands and their creative thinking methods develop. It ensures that the prospects for interdisciplinary integration in modern education are high.

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