

## **ORGANIZATIONAL-METHODOLOGICAL INTER-OBJECTIVE INTEGRATIONS IN TEACHING SPECIAL DISCIPLINES**

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### **ABSTRACT**

This article deals with organizational and methodological interdisciplinary integrations in teaching special subjects in higher education, a variety of integration, curriculum integration and modular integration.

**Keywords:** Integration, training, special disciplines, education, professional knowledge, interdisciplinary communication, teaching methods, specialists.

### **INTRODUCTION, LITERATURE REVIEW AND DISCUSSION**

According to international experience, the integration of higher education disciplines with science and industry, as well as the harmonization of theoretical and practical education are important due to the formation of professional competencies of future specialists.

Despite numerous scientific studies on the development of professional knowledge and skills for university students in a market economy, the labor force in various sectors of the economy, which fully mastered general and specialized subjects that can withstand the vital competition in the labor market, as a means of improving the professionalism necessary to enable them to carry out their activities necessitates the formulation of their required and sufficient level of training through interdisciplinary integration [1, 70].

The changes taking place in our country are closely related to the rapid introduction of new and even more so - advanced technologies, which, in turn, requires the training of highly qualified specialists. The Strategy for the Further Development of the Republic of Uzbekistan pays special attention to the issues of "... improving the work of students of higher educational institutions in training and employment in the areas of market economy and the needs of employers." To solve this problem, the general professional curriculum of higher education areas has set itself the goal of teaching students through modern methods of calculation on practical issues of the specialty.

This demonstrates the importance of effectively using the opportunities of interdisciplinary integration in higher education.

Thus, in an interdisciplinary approach, interdisciplinary coordination of new knowledge (formed as a result of mastering the relationship between knowledge in different subjects) or newly acquired skills (formed as a result of the relationship between teaching methods used in different subjects) in the learning process helps a student to improve learning outcomes and optimize learning process.

The research results show that interaction in the learning process is an important tool for creating educational, educational, developmental and attractive functions.

One of the conclusions of these rules is the mandatory merging of training with their application, and the development and application of knowledge is a two-way process. Using knowledge to solve real-life situations requires that students select relevant subjects from several subjects in the curriculum.

The concepts included in the content of each item include the concepts of a number of items. They are the source of their own associations. A special place in the discovery of this idea is given to the teacher, because the process based on interdisciplinary connections leads to a complete and accurate understanding of students.

Researchers say that, focusing on innovations in science and education, the following requirements must be met:

- the interdependence of processes - systematization, that is, the continuity of education in the secondary special, and higher education;
- interdisciplinary discipline of subjects - interrelated processes of general education, general and special subjects;
- interpretation inside the blocks of subjects, that is, the content of the subject, method of admission, technology and the relationship between educational materials.

When it comes to the integration of education, it is understood that the integration of knowledge is not only about the relationship, but also in the integration of learning technologies, methods and forms.

These analyses show that one of the priorities of the educational process is the provision of secondary education, professional and special sciences in higher educational institutions. Interdisciplinary communication contributes to the formation of interconnected knowledge and skills in changing the content, method and form of education and the learning process.

The implementation of subjects related to science in the field of special subjects is connected with the acquisition of dialectic knowledge, that is, the acquisition by students of professional knowledge, self-study, out-of-class seminars, conferences, seminars, internet information, usage of various sources of information. To determine the effect of interdisciplinary integration on the formation of the reader's thinking, it is necessary to consider the mental processes associated with the search and establishment of relationships between the various knowledge acquired in his mind.

Determining the mechanism of interaction between interdisciplinary integration involves the establishment, strengthening and movement of transitional neural networks and the implementation of mental activity [4, 315].

The theoretical analysis of scientific sources has shown that preparing students in higher educational institutions for professional activity through interdisciplinary connections allows future junior specialists to become mature specialists.

Modeling can be used as an effective means of solving the problem of using interdisciplinary connections as a tool for improving the quality of training future junior specialists. The purpose of the modeling method is to provide a sufficient level of dialectic connection between the elements and subsystems of the system under study by the model [3, 28].

Modeling as a method of understanding allows you to synthesize an object to reflect current knowledge through reflection or reproduction.

The model of interdisciplinary connections determines the quality of the student's professional training and, as a result, the future specialist's ability to master an independent study of this activity. Therefore, the time characteristic of this model is its dynamics, and it involves the acquisition of independent knowledge based on interdisciplinary communication in higher education institutions.

One of the most important features of the organizational and structural model that we developed is its integrity, because the research goal cannot be achieved by introducing any component of this model [2, 36].

The ability of a student to independently master knowledge and skills develops in a college under the following conditions, which are interconnected with theoretical, psychological, educational, organizational, design, communicative components:

- formation of a complete vision of the future professional activities of students through interdisciplinary integration;
- organization of modular training in the process of teaching the subject of baccalaureate "Technical maintenance of light industry equipment" and magistracy "Fundamentals of research and technical diagnostics of light industry machines" through interdisciplinary integration;
- the formation of reflection and competence that is dialectical thinking as an independent learning mechanism.

Today's students are forced to turn to independent activities not only to reduce the time to adapt to professional activities, but also to keep up with new and modern technologies and find a field of knowledge in accordance with their capabilities. The flexibility of graduates largely depends on the ability to improve their professional skills [5, 156].

Activities based on interdisciplinary communication provide a complete picture of the training of future professionals.

Integration in learning is the process of establishing links between the structural components of content within a particular education system in order to form a holistic view of the world focused on the development and self-development of the student's personality.

For our time, the integration of sciences is characteristic, the desire to get the most accurate picture of the general picture of the world. These ideas are reflected in the concept of modern education. But to solve such a task is impossible within the framework of one academic subject. Therefore, in the theory and practice of education, there is a tendency to integrate academic disciplines (integrated courses, integrated lessons), which allows students to achieve interdisciplinary generalizations and approach an understanding of the overall worldview. This is especially important for teaching mathematics, the methods of which are used in many fields of knowledge and human activity [6, 70].

The value of interdisciplinary integration has found its content and essence in the normative functions of the educational process, in the integration of subjects in order to create a holistic view of the world, in ensuring a systematic outlook of students, in creating optimal conditions for the formation of modern economic and dialectical thinking, in shaping knowledge and

methodological skills with the transformation to the principle of knowledge of the world of ideas of development and the unification of the general principle of the unity of the world with the general principle of development in the process Buchan with didactic principles of a systematic approach of developmental education.

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