

THE PRINCIPLE OF INTERDISCIPLINARITY AS A FACTOR OF DEVELOPMENT OF LOGICAL COMPETENCE OF FUTURE MODERN TEACHERS

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Abstract. *In this article, the principle of interdisciplinarity, its main function in the organization of the educational process, and its role in developing students' logical competence are sufficiently revealed.*

Keywords: *Didactic principle, principle of interdisciplinarity, logical competence, stages of implementation of the principle of interdisciplinarity.*

In the conditions of modern education, the preparation of a future specialist for professional activity in each educational subject is determined not by the level of theoretical knowledge he has acquired, but by the knowledge he has acquired at the level of his needs in practice, that is, life and professional. It is measured by the level of practical application in the course of its activity. Unfortunately, in today's conditions, as in traditional education, most teachers working in educational institutions are limited to providing students with ready-made knowledge. This is hindering the realization of modern educational needs in a situation where the content of education is increasing year by year, and students' study programs are decreasing.

Our research and analysis of existing experience show that the development of students' logical competence on the basis of the principle of interdisciplinarity plays an important role in solving this problem.

The problem of interdisciplinarity arose during the introduction of separate teaching of academic subjects in schools. Jan Amos Comenius was the first pedagogue to scientifically base the problem of interdisciplinarity. . [1]

One of the followers of Comenius' ideas was the English philosopher J. Locke. In his work entitled "Thoughts on Education", he believes that "connecting interdisciplinarity with the need to determine the specific content of education, in which one topic should be supplemented with elements and facts of another." [2]

Also, I.G. Pestalozzi developed the idea of interdisciplinarity in the educational process in his theory, he said: "the problem of learning, on the one hand, is to separate objects from each other, and on the other hand, "in our minds it should be "to combine similar aspects and on this basis bring more clarity to our ideas and, after fully understanding them, raise them to concrete concepts".[3]

V. D. Dalinger defines "interdisciplinary communication" as follows [4]:

didactic condition;

a component of the principle of systematicity and sequence;

independent didactic principle;

the didactic equivalent of interdisciplinary concepts;

means of didactic study of real connections;

a means of ensuring continuity in the development of scientific knowledge;

system, method, tool, pedagogical category, interdisciplinary relationship;
interoperability of educational programs;
relations between the components of the structure of the academic subject.

Based on the above and the analysis of research works of other scientists, let's consider the content of the concept of interdisciplinarity.

The concept of interdisciplinarity is recognized as a special principle in didactics, it has been researched by a large number of scientists, and many definitions have been given to this concept in pedagogical and methodical literature. Including:

In most of the given definitions, interdisciplinarity is described as a didactic condition.

In the course of education, the problem of inter-discipline connection began to arise from the period when academic subjects were taught separately. By the 70s of the last century, this problem was studied by scientists as one of the urgent problems. In order to solve this problem, a program was developed for the subjects taught in all educational institutions, and in these programs, the section "Interdisciplinarity" was given separately. In it, basic concepts, laws, theories and the most important skills in related disciplines are distinguished, and the educational process is organized on this basis.

The analysis shows that the problem of interdisciplinarity is a complex pedagogical phenomenon, which reflects the interrelationship of educational, educational and developmental functions in the teaching process. In order to effectively achieve this in the educational process, it is logical to determine the content of each subject based on the personal needs of students in the context of individual-oriented education, as well as their effective mastery of subjects. ensures formation and further development of competence. Also, such an approach to analyzing the educational process:

- to ensure the scientificity of teaching;
- to increase the cognitive activity of students;
- to acquire knowledge consciously;
- ensuring interdisciplinary integration;
- ultimately leads to the formation of logical competence.

The main task of establishing interdisciplinary relations is to form scientific knowledge, consistent worldview and methods of activity in students.

Achieving interdisciplinarity in the educational process - elements of educational content, development of ideas and concepts of system formation, general scientific methods of educational activities, increasing the possibilities of effective comprehensive application of knowledge acquired in various disciplines in professional activities will bring.

The effective implementation of interdisciplinary communication usually depends on the extent to which the main interdisciplinary integration is provided in a particular educational course. can be achieved by providing a link between the analysis and interpretation of facts, scientific knowledge and methods of mental activity.

The results of our research show that it is advisable to implement the development of interdisciplinarity in the following two stages in order to achieve the formation of students' logical competence:

STAGE I. Preparation stage. This stage examines the orientation of students to the content of a new subject, their psychological readiness to learn the subject in question on the basis of interdisciplinarity. Therefore, at this stage, before passing a new topic, work is considered that will

lead students to understand the essence of integrating the content of the topic and the need to reveal its leading rules. In this, knowledge acquired in other subjects is used. In this work, a perspective plan for the study of the studied subject is developed based on the principle of interdisciplinary communication of the teacher in cooperation with students.

STAGE II. This is considered the main stage, and based on a collaboratively developed plan, students build the main stage of revealing the guiding principles of the new topic and study the new topic.

Reminder. In this case, the subject teacher works on the content of the leading ideas of other educational subjects in advance consultation with the teachers of those subjects.

This interdisciplinary work is not only limited to classes, but also leads to the organization of interdisciplinary seminars, field trips, written tests, projects and educational research, various conferences, etc.

Organization of training sessions based on these steps:

firstly, it serves to regulate the work of teachers in the implementation of interdisciplinary communication in the educational process;

secondly, it allows to evaluate the results achieved during the training session;

thirdly, it allows to control and evaluate the level of mastery of the ability of students to patiently use the knowledge acquired from other subjects in the process of learning a new subject.[5]

The following difficulties are encountered in the organization of educational activities based on the principle of interdisciplinarity:

1) Terms and signs used in different disciplines and their interpretations are different. These, in a certain sense, create certain difficulties in explaining to students.

2) The role of things related to other subjects in the formation of students' skills and qualifications is not properly assessed.

3) Concepts formed in the study of other subjects are often not used in the teaching of subjects.

4) A topic that takes an important place in the study of a subject must not be studied in another relevant discipline (lack of integration, etc.).

In order for the future teacher to be able to effectively use interdisciplinary communication in the course of his professional activity in the future, he should have the following:

to know the basic principles of organizing educational and methodical work on the implementation of interdisciplinarity in the educational process;

to understand the role and place of interdisciplinarity in the modern education system and to foresee their development prospects;

to have a sufficient idea of the structure, classification and characteristics of interdisciplinary communication in the educational process;

to have a clear idea about the problems of interdisciplinarity at the current stage of the development of the educational system;

to have sufficient training in the psychological and pedagogical aspects of the implementation of interdisciplinarity in the educational process;

to have an idea about the structure of the didactic system of interdisciplinarity and to be able to operate on this basis;

to know the forms, methods and means of interdisciplinary communication in the

educational process;

students' understanding of the meaning of interdisciplinarity in the formation of logical competence;

to have conceptual thinking;

to have knowledge about software tools, methods and tools that can be used to implement interdisciplinary communication[;

to have skills and qualifications in the use of modern pedagogical, innovative and information and communication technologies;

it is required to have the skills of conducting pedagogical research.

In general, the components of the modern teacher's model of interdisciplinary communication are:

psychological, pedagogical and technological components;

information culture of the teacher, regardless of his specialty;

logical competence;

includes adequate training in general education.

In conclusion, it can be said that the principle of interdisciplinarity of didactics serves as the main factor in the formation of the logical competence of the future modern teacher and its further development.

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