DOI 10.12851/EESJ201610C05ART06

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Interdisciplinary Communication as a Didactic Condition of Increasing the Efficiency of Educational Process

Key words: approaches, between subject, categorization, didactics, education, efficiency facility, fair special, form, function, knowledge, method, modern, notion, optimum, organizing is directed, pedagogical, principle, problem, profound, realization, relationship, scholastic process, scholastic subject, science, system, vocational training.

Annotation: the article adequately reflected in the academic subjects, representing essentially based on relevant science - in this aspect of the didactic problems interdisciplinary connections.

Relationships Sciences are adequately reflected in the academic subjects, representing essentially based on relevant science - in this aspect of the didactic problems interdisciplinary connections. All branches of modern science are closely linked, and therefore learning objects can not be isolated from each other. Interdisciplinary connections are didactic conditions and means of deep and all-sided assimilation of the fundamentals of science in the process of learning, contribute to a better assimilation of knowledge and the formation of scientific concepts and laws of educational process and tweaked it organization, the formation of a scientific outlook. In addition, they contribute to increase scientific level of students' knowledge, the development of logical thinking and their creative abilities. Realization of intersubject communications eliminates duplication in the study of the material, saves time and creates favorable conditions for the formation of skills and abilities of students.

The problem of the study is devoted to interdisciplinary connections quantity of great works of scientists and educators: Zverev ID, Maximova, VN, Alikulov S. Musurmonova O. Mamaradzhpova S, Abdullayeva B, Baratova M. et al. Due to the versatility of approach to the problem of inter-subject relationship, the desire to solve various educational tasks related to the implementation of inter-subject relationship, there are not only different definition of interdisciplinary connections, but also various types of classifications of inter-subject ties.

Many authors have noted that the implementation of interdisciplinary connections contributes to the implementation of all training functions: educational, developing and educating. One of the most effective forms of realization of inter-subject communications in the classroom is to solve applied problems, and pointed out that interdisciplinary communication - a connection to reality, they reflect the objectivity of the world and, therefore, should determine the content, methods and forms of training. They identified the main didactic function of inter-subject

relations, ways to implement them in the classroom, the basic pedagogical problem for interdisciplinary connections.

In pedagogical literature, there are more than 30 definitions of "interdisciplinary communication" category, there are a variety of approaches to teaching and assessment of the various classifications.

In our study, we are based on the definition given Zverev ID. and Maximova VN. (1, p. 160): "Interdisciplinary communication are the most important factor in the development of modern learning and cognitive activity of students. Picking up on a higher level of the whole process of learning, interdisciplinary communication have multilateral influence, ensuring the unity of the educational function of developing the educational process.

Interdisciplinary communication - is a process and the result of creating a unified whole is continuously connected. In training they are carried out by merging into one synthesized to date (subject, topic, program) elements of different subjects, a fusion of scientific concepts and methods of different disciplines in the general scientific concepts and learning methods, aggregation and summarizing the fundamentals of science in solving interdisciplinary educational problems "Interdisciplinary communication are is reflected in the content of educational disciplines of the dialectical relationships that objectively valid in nature and are known to modern science."

In training they are carried out by merging into one synthesized to date (subject, topic, program) elements of different subjects, a fusion of scientific concepts and methods of different disciplines in the general scientific concepts and learning methods, aggregation and summarizing the fundamentals of science in solving interdisciplinary educational problems "Interdisciplinary communication are is reflected in the content of educational disciplines of the dialectical relationships that objectively valid in nature and are known to modern science. "... As is known, the system assumes the integrity, the unity of the elements that are in a relationship of mutual subordination, hierarchy - the integrity that serves the achievement of certain goals. As the system can be considered secondary specialized vocational education. The logical connection of individual systems of knowledge in academic subjects find expression in the content of education (2, p.148).

The content of any school subject can be considered as didactic systems, communication function that performs the leading ideas. Leading idea of function as the backbone links in the content of subjects about which there is an association and its structural elements into a single system. The leading idea in the learning process can perform an integrating function. Training material was studied on the basis of interdisciplinary, thus, contributes to the generalized nature of the cognitive activity of students. Interdisciplinary communication can be seen as a necessary element of the objective of training systems for objects and their relationship cannot be opposed to each other. Systematic training - pedagogical principle, the implementation of which allows, in accordance with age-related capabilities of pupils reach their systematic knowledge. The implementation of this principle - a necessary condition for the success of training. Combining academic subjects in the system, interdisciplinary communication is done only by their inherent

function - synthesis of knowledge and on this basis, the formation of a holistic philosophy and holistic personality.

In his pedagogical theory interdisciplinary connections Maximov VN. (3, p.192) distinguishes three main groups:

- 1. Content-information by type of knowledge (scientific (factual, conceptual, theoretical), philosophical, ideological);
- 2. The operational-activity by types of skills (cognitive, practical, value-oriented);
- 3. The organizational and methodical on ways of realization of intersubject communications in the learning process (by a process of assimilation: reproductive, search, creative; the breadth of implementation: intracyclic, intermenstrual; chronology of implementation: continuity, accompanying, perspective, according to the method of establishing: unilateral, bilateral multilateral, forward and reverse, for the implementation of permanence: episodic, periodic, systematic, in the form of implementation: pourochnye, thematic, cross-cutting, complex).

Proceeding from this it can be noted that the subject communication performed at different levels:

- At the level of objects belonging to different cycles (General subject or inter-cycle of communication);
- At the level of subjects of the cycle belonging to the same group or different groups of subjects (intracyclic communication);
- On the intra-subject level.

All these connections are mobile, into each other dialectically.

Interdisciplinary communication carried out at the level of forms of learning ("interdisciplinary" seminars, workshops, field trips, electives and some extracurricular activities, search local history work, evenings, exhibitions and so on. D.), And at the highest level (integrative, communication between objects as a whole between their groups, cycles, communication), improvement of the secondary professional education in the future should be taken into account as the "autonomy" of subjects and their interdependence and unity at all levels. The question of how to implement interdisciplinary connections - this is one aspect of the general problem of improving teaching methods, which we define a leading role in our study. Interdisciplinary communication - a multi-faceted phenomenon, different characters, different functionality.

Interdisciplinary communication are characterized, above all, its structure, and because the internal structure of the object is a form, we can distinguish the following forms of communication, composition: content, operational, methodological, organizational; directed by: unilateral, bilateral, multilateral, by the process of the interaction bonds form elements: chronological, chronometric.

Interdisciplinary communication composition show - which is used, is transformed from other disciplines in the study of a particular subject. Based on the fact that the composition of intersubject relationship is determined by the content of the educational material, formed skills,

abilities and mental operations, the first of their form, we can identify the following types of interdisciplinary connections:

- 1) content the content of the material being studied, on the use of interdisciplinary nature of knowledge, the unity of the interpretation of the concepts, phenomena and processes studied in various subjects;
- 2) operational formed on the skills, abilities and interdisciplinary nature of mental operations;
- 3) methodology harmonization of methods and teaching techniques of academic work on various subjects, application of the same methods of research in the study of material of various objects (graphical, analytical);
- 4) organization the coordination of forms of organization and structure of employment in subjects between which communications are established.

Types of inter-subject relations in the direction of the show: is a source of interdisciplinary information for the particular educational topics studied on a wide interdisciplinary basis, one (unilateral) Two (bilateral) or more (multilateral) subjects.

Interdisciplinary communication by temporary factors may have types of links:

- 1) chronological a communication sequence for implementation;
- 2) chronometric a connection for the duration of the interaction of elements of slime.

The time factor shows:

- 1) what kind of knowledge drawn from other disciplines, have already been received by students, and some material has yet to be studied in the future (chronological connection);
- 2) what topic in the process of inter-subject relationship is a leading study on the timing, and what led (chronological synchronous communication).
- 3) how long the interaction of bodies in the implementation of interdisciplinary connections.

The above forms of interdisciplinary connections allows the same consideration in exchange communication (communication, e.g. between higher mathematics and physics), and Intra links between certain themes of the subject. In the inside of the course and within the subject of the chronological relationships of species dominated continuity and perspective kinds of relationships (4, p.135).

As a result, the study of the works consumption interdisciplinary connections we have considered all types of interdisciplinary connections in the material computerization rates of employment and secondary special study of financial - economic professional colleges.

Development of theoretical bases of intersubject communications in teaching the subject, in terms of disclosure of its leading positions, makes it possible to apply the mechanism for identifying and planning interdisciplinary connections to the specific topics of the subject under study.

Thus, the purse to note that the means of realization of inter-subject communications in the process of learning can be diverse: question, private setting, problem situations, cognitive tasks, the tasks of research and experimental type and they are dominant factorials increase the effectiveness of the educational process.

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