

## POSSIBILITIES OF FORMATION OF LOGICAL COMPETENCE IN FUTURE TEACHERS

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<https://doi.org/10.5281/zenodo.10157102>

**Abstract.** *This article is devoted to the possibilities of formation of logical competences in the future modern teacher, in which logical competence, the basis of its formation, the processes that prevent its formation and the possibilities of their elimination are sufficiently disclosed.*

**Keywords:** *competence, logical competence, professional competence, annotated card file.*

Modern education requires every specialist, including every teacher, to have logical competence. Because, in the conditions of modern education, every teacher should feel the harmony of pedagogical and methodical influence of all academic subjects and teachers according to their specialty.

The requirement to organize the educational process based on the competence approach in the higher education system imposes the task of forming various competencies that provide professional qualifications in a modern specialist, including a teacher.

Among these professional competences logical competence occupying a special place, it serves as one of the main factors in the training of future modern teachers.

Logical competence is an integral part of human natural intelligence and serves as the main theoretical basis for the creation and development of artificial intelligence.

**Logical competence:**

*the ability to work logically with concepts;*

*the ability to work logically with judgments;*

*deductive and inductive abilities according to the laws of logic and achieving its formation leads to the formation of the following in students:*

***Firstly:***

*communicative (communication) skills, that is, the ability to understand each question and formulate an appropriate answer;*

*to perceive the interlocutor's position, to identify situations that are accidental and may lead to disagreements;*

*the ability to build a dialogue constructively;*

*the ability to form one's own position, to present it meaningfully based on it.*

***Secondly:***

*information processing skills, that is, the ability to follow the general logic of the presentation;*

*the ability to distinguish the main semantic sections;*

*the ability to understand the connections that allow you to move from one position to another;*

*the ability to analyze information from different sources, that is, to identify fixed ideas and positions that require coordination.*

***Thirdly:***

*thinking skills, that is, the ability to formulate a problem, develop a plan to solve it, choose the actions necessary for this, solve it, and determine the level of adequacy of the performed work.*

All of the above are considered skills that do not change in relation to the content of the studied educational material, and they are considered components of the general preparation of a person. In this, the first step: *content of work necessary for learning during the entire educational process and for effective professional activity in the future;*

*conditions for permanent change of their nature;*

*includes the need to acquire new knowledge quickly and efficiently.*

In achieving these logical competence occupying an important place, it ensures the compliance of the knowledge acquired at the higher education institution with professional requirements during the professional activity of the future modern teacher and forms the ability to independently master new areas of knowledge. In today's modern educational environment, it takes time to develop the skills listed above.

Tasks considered in this process include not only information collected from different sources on a certain topic, but also their selection, systematization, comparison, etc., are considered important in achieving the intended goal.

In the formation of logical competences, working with scientific terms causes certain difficulties for students, which mainly consist of the following: *they do not know how to distinguish between the descriptions of the object, which can be used as the main definition, that is, they cannot see the difference between the description of the object and the characteristic of the object;*

*they don't know what the exact definition should be, why it should be like that;*

*insufficient reasoning skills;*

*the difference between what can be assumed based on the given data and what reliable conclusions can be drawn from it is not sufficiently accepted by all students;*

*the lack of ability to independently form methods of summarizing existing information and verifying it, etc.*

Experiments and analyzes show that the principle of interdisciplinary didactics and intersubjectivity plays an important role in the formation and development of logical competences of future teachers.

However, a unified approach to determining the rational ways of implementation in the practice of HSE of has not yet been developed. To solve this pedagogic-methodical problem, it is considered appropriate to consider a separate topic in the program of pedagogical HEIs, in particular, in the programs of psychological-pedagogical and methodical disciplines, on interdisciplinary connection and the possibilities of its implementation.

In this case, it is necessary to ensure connection not only between subjects, but also between categories (for example, subjects in the category of mathematics teaching methodology).

In addition, it is necessary to pay attention not only to inter-subjects or inter-subjects or inter-categories, but also to the internal connections of each academic subject. Because between subjects or modules of academic subjects

SCIENCE cannot be effectively implemented without ensuring internal connections. For example, in the study of "Common pedagogy", achieving connections not only between individual topics, but also between modules, that is, between the introduction and the methodological part, or didactics and the theory of education, is necessary for each subject. serves to implement a

functional approach to learning. In order to achieve this, the formation of logical competence in every teacher is important.

To achieve the above, it is necessary to implement the educational process based on the competence approach. Because, in the conditions of education directed to the individual, without a competent approach, educational goals cannot be achieved without guarantee. In this regard, the Russian scientist A.V. Khutorskoy “...*the main results of the educational goals are recorded through a set of educational competencies, which determine the main criteria for choosing the main types of activities, the main content and conditions of the organization, which allow the student to master social experience, acquire life and practical skills in modern society will give*” [1].

Example. In order for the future mathematics teacher to become a qualified modern teacher: *mastering the activities necessary to acquire the knowledge needed to solve various problems encountered in his professional and life activities;*

*mastering the methods of activity necessary in the process of effectively acquiring knowledge independently;*

*it is required to master the ways of using specially developed methodical problems using different means and methods of knowledge [3].*

All of the above led to the need to form and develop professional competencies in them. It is known that competence is a set of acquired competences of a person, which is determined by the personal qualities of each person, the experience of activity in a certain personal and socially important field, and logical competence in fulfilling the requirements that we have considered above. it is important to be formed.

In the development of logical competence, the effective and appropriate use of scientific research methods such as observation, experiment, and modeling has a special place in the educational process, in which the achievement of interdisciplinarity is the main place, and it is the learning of other subjects in the process of teaching one subject. specifies the use of teaching methods.

Example. Solving mathematical problems with material of physical or chemical content, drawing function graphs, etc. [4].

Studies and researches show that it is important to achieve the goal of achieving the integration of logical methods with the methods of artistic and pictorial representation of reality in providing interdisciplinary communication in the teaching of humanities. It is necessary for teachers of different subjects to work together. In this case: access to mutual classes, exchange of opinions on the necessary information ensures effective professional activity.

Therefore, it is necessary for all science teachers to understand the ways to implement this condition and to follow it. It should be natural and necessary for every teacher to know the material of a specific subject, methods of implementation of general tasks of teaching, and didactic principles. Content of collaborative activity of science teachers:

*formation and development of basic didactic concepts in students during the educational process;*

*independently improves knowledge and leads to the formation of Boorish skills;*

*ensures students' activity in scientific research.*

Therefore, effective and appropriate use of the principle of interdisciplinarity in the formation and development of logical competences of future teachers in pedagogic institutions of higher education is of particular importance.

Because the formation of the system of scientific knowledge in students is ensured by mastering academic subjects. Each academic subject basically corresponds to one of the fields of modern science [2].

Example. Sciences of the natural-mathematical series are the basis of systematized knowledge of nature, its interconnection and development.

Experience shows that creating annotated files of lectures, seminars and laboratory sessions in the departments significantly helps to quickly improve interdisciplinary connections. In such a card file, the content of each subject and training and their cross-disciplinary connections with other educational subjects and training are specified. In this case, the material is consistently complicated and the introduction of elements of repetition of what was previously learned is a general principle.

In general, the effective use of the principle of interdisciplinarity in training sessions on psychological, pedagogical and methodical subjects leads to the formation of logical competence in students. This, in turn, increases the possibilities of training teachers with sufficiently developed modern professional competencies.

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