

## Competence Approach in the Formation of Organizational and Pedagogical Competence of Future Teachers of Informatics

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**Abstract:** *The article considers the general content of the process of formation of the organizational and pedagogical competence of future teachers of informatics. Analyzing the issues of identifying and existing theoretical and methodological approaches to the training of future specialists. Actively discussed the problem of preparing a future teacher from the standpoint of various approaches.*

**Keywords:** *future computer science teacher, competence, organizational and pedagogical competence, systematic approach, competence approach.*

### Introduction

The most important tasks set for the further improvement and complex development of the higher education system in the future are the training of highly educated specialists, that is, the continuous improvement of the quality and level of professional skills of pedagogic personnel, which represents today's relevance.

The next approach reflected in our research is the competent approach, which considers not the sum of information obtained as a result, but the ability of a person to demonstrate in various educational situations. Competent approach (N.A. Muslimov [1], A.Kh. Makhmudov [2], O.A. Kuysynov [3], B.Kh. Khodjaev [4], V.V. Bazelyuk [5], V.I. Baydenko [6], V.A. Bolotov [7], E.F. Zeer [8], I.A. Zimnyaya [9], D.A. Ivanov [10], O.E. Lebedev [11], A.V. Makarov [12], N. Rustamova [22, 23, 24, 25, 26, 27], Z. Yulchiyeva [17, 18, 19, 20, 21] and others) is an approach that focuses on educational results. However, it is not the sum of information obtained as a result, but the ability of a person in various problem situations that is considered.

### Materials, Methods and Discussion

In the implementation of the competent approach, the educational content is manifested as a pedagogically adapted social experience consisting of four main structural elements:

- 1) cognitive activity, its results - as an experience recorded in the form of knowledge;
- 2) the emergence of certain methods of activity - as an experience in the form of the skill of moving according to a pattern;
- 3) creative activity - as an experience in the form of the ability to make non-standard decisions in conflict situations;
- 4) establishing emotional-valuable relations - as an experience in the form of personal orientation.

The importance of a competent approach is shown in our research work as follows:

- in the process of scientific understanding of organizational-pedagogical processes as an organizational-pedagogical preparation of the future informatics teacher (understanding the organizational-pedagogical aspects of informational education within the framework of various disciplines, studying their connection and creating a holistic vision on this basis).
- epistemological, meaningful, technological, didactic aspects of organizational-pedagogical training as a principle that helps to form generalized methods of educational activity, and ensures the acceleration of processing and assimilation of educational information.
- is manifested as the conditions for achieving the development of organizational and pedagogical competence of the future informatics teacher through the integration of scientific knowledge and the formation of synthetic skills in the process of organizational and pedagogical preparation.

From the above, we can conclude that it is important to use systematic (as a general), personal-active (as a theoretical-strategy), competent approaches in the process of developing organizational-pedagogical competence in future informatics teachers. It should be emphasized that it is advisable to collectively use the possibilities of these approaches in the organizational-pedagogical development of future informatics teachers. A single approach may not be fully effective in the process of developing this competence.

The problem of developing organizational-pedagogical competence in future informatics teachers requires the development and modeling of the optimal options for evaluating the form, methods and results, the stages of the development process, the components of organizational-pedagogical competence, the principles of the development process, taking into account the pedagogical-psychological characteristics of the future teacher, the pedagogical-psychological characteristics of the participants of the pedagogical process is enough.

Basing on the structure and components of organizational-pedagogical competence made it possible to develop a pedagogical model that serves to ensure the effectiveness of the implementation of this process within the framework of research.

Model comes from the Latin module, which means measure, standard, and is a copy of something that can be used as a template for many productions.

Modeling is a scientific method that allows you to create various models of the object of knowledge and use it in scientific creation. In the modeling method, instead of the object, its model is studied [13]. To model - to make a model of something, to create [14].

From the opinions of the authors, it can be concluded that modeling the process of organizational-pedagogical competence development is developed on the basis of the requirements that are important in the organization of the educational process, representing the use of necessary methods, methods and tools, the stages, functions, principles and forms of the organization of this process. is a template that can be used in the organization of reflective educational process [26].

Considering the existing approaches to the development of organizational and pedagogical competence of future informatics teachers, we present the following model of this process. The model for the development of organizational and pedagogical competence in future informatics teachers consists of three interrelated stages: 1) motivational-target block; 2) meaningful-practical block; 3) meaningful-practical block.

The motivational-objective block performed the task of goal-value orientation and reflected the social order, the main goals and tasks of organizational-pedagogical training of future informatics teachers. As a social order, formation of an informatics teacher with organizational-pedagogical competence in the conditions of innovative education is determined. The goal is to develop organizational-pedagogical

knowledge, skills and personal qualities, to develop conditions that develop professional stability based on the development of organizational-pedagogical competence in future informatics teachers. In the process of developing organizational-pedagogical competence, determining the goal ensures taking into account the influence of factors that are of particular importance as a social-pedagogical system [15].

The tasks defined in accordance with the purpose are directly related to the content of the process, development of organizational-pedagogical knowledge, skills and personal qualities of future informatics teachers; clarification of the content and possibilities of organizational-pedagogical competence development; development of conditions that develop professional stability based on the development of organizational-pedagogical competence in future informatics teachers; envisages the improvement of the practical-technological system of developing organizational-pedagogical competence in future informatics teachers [16].

The content-practical block fulfills the informative-developing task and has a direct impact on the process of developing organizational-pedagogical competence in future informatics teachers. and inculcating the culture of using green technologies in future informatics teachers; development of ICT literacy in future informatics teachers; It represents pedagogical conditions such as organizing classes based on an integrative approach [22]. Organizational-pedagogical conditions complement the planned activity with clearly defined content, and testing and verification of these conditions was carried out during the experimental activity on the development of organizational-pedagogical competence in future informatics teachers.

The result-evaluation block represented the analytical tasks and reflected the criteria, indicators and levels of evaluation of the development of organizational-pedagogical competence in future informatics teachers. When defining the criteria, their exact compatibility with the components of organizational-pedagogical competence was taken into account. In clarifying indicators suitable for each criterion, on the one hand, the possibility of checking it in natural conditions, and on the other hand, the convenience of choosing diagnostic tools were taken into account. Three (minimum, standard, maximum) levels of assessment of organizational-pedagogical competence development in future informatics teachers were determined. It should be noted that the goals and objectives of the process of developing organizational-pedagogical competence of future informatics teachers are related to the stages of the structural-functional model.

Implementation of this model requires consideration of the following principles: integrity, unity of theory and practice, consciousness and activity, development of professional creativity, principles of continuity.

The principle of integrity requires taking into account the unity and interrelationship of personal development with education, upbringing and development in the development of organizational and pedagogical competence in future informatics teachers.

The principle of the unity of theory and practice is manifested in the development of the organizational-pedagogical competence of the future informatics teacher, as the connection between theory and practice ensures that future teachers theoretically understand the need for practical activity.

The principle of consciousness and activity represents the conscious activity of the future informatics teacher under the teacher's guidance during professional training. Conscious activity in the development of organizational-pedagogical competence should be focused on "not just simple reminders and attention, but the process of deepening knowledge." In the process of professional training, future informatics teachers need to show activity and awareness in relation to learning about the development of organizational-pedagogical competence, to acquire theoretical knowledge, to analyze and master them at a comprehensible level, to understand the practical importance of theoretical ideas in the field of informatics and ICT, which in turn is awareness and represents the principle of activity.

The next principle regulating the activity block of the structural model is the principle of professional creativity development. This is a part of professional activity, which is characterized by the search for events in professional problems and the implementation of non-standard original creative solutions. This principle requires a constant search for problem-solving strategies and a creative approach to situations that require cognitive activity when solving a system of simple and complex mental tasks.

The principle of continuity in the development of a person with organizational-pedagogical competence, encouraging self-development motives of the future informatics teacher is based on creative self-development by providing information on the style of their individual creative activity and organizational-pedagogical aspects of the educational process. At the same time, future informatics teachers should pay attention to self-knowledge, identification, understanding, management and self-improvement as carriers of knowledge, skills and experiences related to organizational-pedagogical qualities and requirements. The implementation of this principle provides comprehensive study of motivational, emotional-volitional, intellectual spheres, selection of motivational forms, methods and styles taking into account individual characteristics, practical assistance and comprehensive counseling of informatics teachers.

The principle of development of reflexive skills is also important in our research work. In Sh.S.Shodmonova's doctoral dissertation on pedagogic sciences entitled "Formation and development of independent thinking in students of higher educational institutions" (as an example of vocational education), Sh.Kurbanov, E.Seytkhalilov, M.Kuronov, R.Ahlidinov and I.Majidov have the following reflections features are mentioned: reflection is an important mechanism of effective thinking; separate organization of the processes of understanding the happening event (includes evaluating the situation and actions, finding methods and operations for solving tasks); the process of self-analysis of the individual and others involved in solving tasks, actively thinking about their situation and actions. Therefore, reflection (going back) can be both internal (as an individual's experience and self-reflection) and external (as a collective thinking activity and joint search for solutions). The principle of development of reflexive abilities is considered as the principle that logically completes the system of the structural model of the development of organizational-pedagogical competence in future informatics teachers, and it develops reflexive skills in future teachers.

## Conclusion

Each of the model blocks has its own functions, specially selected content and didactic peculiarities, and serves to solve a certain part of the general pedagogical task of developing organizational-pedagogical competence. Due to the fact that the model of organizational-pedagogical competence development of future informatics teachers has a exploratory description, it is necessary to study this process in the future.

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