# Development of information competence of future informatics teachers as a pedagogical problem

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**Annotation:** this article presents scientific information based on the introduction of innovations in the educational system in the issues of solving the pedagogical problem of the development of information competence of future Informatics teachers.

**Keywords;** globalization, state strategy, educational, ideological-ideological, labor, moral, aesthetic, physical, intellectual, legal-civil

Perfect generation education and self-education aims to develop all aspects of young people, and this educational process creates a unity of all types of educational, ideological-ideological, labor, moral, aesthetic, physical and self-education.

In the conditions of independence, for example, it is very important for every young person to be aware of spirituality and its essence, to understand information as a source of knowledge, to achieve computer and Internet literacy. Especially in the context of the globalization process, it is necessary to understand not only its positive effects, but also the essence of the ideas of immorality promoted by the works of art and the moral threats made by the mass media.

In the next period, the topic of knowledgeable and competent approach to education is being actively discussed in scientific circles, that is, the formation of a future computer science teacher as a specialist in order to start work in general secondary education is being considered. Improving the education system of our country is especially urgent. In the government strategy for improving the content of general secondary educational institutions must be a system of knowledge and skills, it is necessary to form a core set of competences in intellectual, legal-civic, communication, information and other fields. This is related to the human capacity associated with the traditional approach to education and the ability to act effectively within educational contexts and educational situations. Competent approach prioritizes the learner's ability to solve problems that arise in life, rather than acquiring information.

During the discussion of the problem of competent approach in pedagogical circles, the word position is often mentioned, in traditional education "the concept of competence does not add any new principled approach", competence is a new interpretation of the concept already used in schools.

The historical roots of the issues of competent approach are reflected in the works of Eastern thinkers Abu Rayhan Beruni, Abu Ali ibn Sina, Abu Nasr Farabi, Abdullah Awlani. In our historical heritage, there are many opinions about the importance and importance of the ideas of orientation to the acquisition of competence knowledge in the development of society.

We can say that the possession of such high qualities ensures the success of not only future professional education, but also the future information competence activities of informatics teachers.

We can achieve the desired result by implementing and applying advanced pedagogical technologies to the educational process in the development of the professional competence of the future informatics teacher.

The theoretical analysis of the essence of the competent approach in foreign pedagogy shows that professional-practical education, which implies the development of educational content based on the reliable and clear expression of activities and behavior patterns that need to be taught, is based on the philosophy of constructivism and behaviorism.

In the monograph of U.Sh. Begimkulov, R.Kh.Djuraev, R.G.Isyanov, Sh.S.Sharipov, Sh.M.Adashboev, M.N.Tsoi, in accordance with the three-level model of information-communicative competence in the pedagogue:

basic level - based on the pedagogue's tasks, the invariant of knowledge, qualifications and skills necessary to achieve educational goals with ICT tools;

technological level - readiness to introduce technology and resources, developed in accordance with the requirements of the methodology and content of professional activity, specialized in ICT mastering and pedagogic activities;

Pedagogical (psychological-pedagogical, methodical, creative) level - it is possible to distinguish between the development of electronic tools suitable for the goals of professional activity, the use of ICT tools in solving tasks for ensuring the spiritual maturity of a person.

In the monograph of O.M.Bobienko and Z.N.Safina, in the definition of the concept of competence, "although it does not negate knowledge, skills and abilities, it does not strictly differ from them. The difference from knowledge is that competence exists in the form of activity, which differs from knowing only information about it (it is necessary to know, but not be able to apply it in the practical aspect of knowledge). The difference from the qualification is that the competence can be changed (transition to different objects of influence) in solving different tasks. the difference from skills is that they are conscious and not automated, they allow a person to act not only in the usual environment, but also in a new unusual environment.

Competence is not opposed to knowledge, skills and abilities, but stands separately in relation to them.

According to B. Khodzhaev, competence (a Latin word that means I will achieve, come right) is the subject's readiness to effectively organize external and internal resources to set a goal and achieve it, in other words, it is the subject's personal ability to solve certain professional issues.

According to N.M. Muslimov, the dictionary meaning of the English concept of "competence" means "ability", but the term competence serves to express knowledge, skill, skill and ability.

In the modernization of the educational strategy, it is not necessary to contrast competence with knowledge, skills and abilities, but to be able to apply it in practice: "The concept of competence is the application of the concepts of knowledge, skills and competence in a broad sense, and includes (in fact, competence is not a simple adaptive sum of knowledge - the meaning of the concepts of competence and skill means several other concepts). The concept of competence includes not only cognitive and operational-technological components, but also motivational, moral, social and behavioral components. It summarizes educational outcomes (knowledge and skills), value orientation system, habits, etc».

Today, in the implementation of a competent approach to education, we rely on world experiences, which are adapted to the traditional educational conditions of our country and its needs. "The concept of competence is understood in its meaning as a central link in the experiences of world education - in which competence, firstly, education includes intellectual and educational skills in its structure;

secondly, the concept of competence contains an ideological interpretation of the content of education "formed by the results" of education; thirdly, the basic competence has an integrative nature, or includes a number of the same or closely related skills and knowledge related to the broad sense of culture and activity (information, legal and other) spheres".

Thus, the analysis of the essence of this concept means the following:

competence is an integrative, complex description of a person;

the concept of competence includes knowledge, skills and qualifications, but does not directly mean their sum;

the concept of competence includes motivational, moral, social, and behavioral aspects from a cognitive and operational-technological point of view;

competence is acquired, manifested in activities (educational, professional, social, domestic, etc.) and is associated with the ability to use the set of knowledge and skills to solve the problems of certain situations.

Often in the literature, the concepts of "competence" and "competence" are considered as synonyms. It is necessary to define the difference between these concepts.

In the dictionaries, the meaning of the concept of "competence" is revealed as "the understanding of issues related to the knowledge and experience possessed by this person", "other actions against competent persons, competent bodies or officials provided for by law", "competence"

1) to have competence;

2) is the possession of knowledge that allows thinking about something.

There are different approaches to classifying the types of competence. For example, N.A. Muslimov and M.B. Urazova divide competencies from the point of view of professional education into the following types:

special competence - mastering one's own professional activity at a sufficiently high level, being able to plan further professional development;

social competence - joint professional activity, acquisition of cooperation, social responsibility for the results of one's work:

personal competence - methods of personal independent reflection and independent development, a person's acquisition of tools to resist professional deformations;

individual competence - acquisition of methods of independent application and development of individuality within the profession, preparation for professional and personal growth, independent organization and independent rehabilitation;

core competencies - cross-cultural and cross-disciplinary knowledge, abilities and skills of a person necessary for adaptation and productive activity.

It can be concluded that each type of competence is a set of knowledge, skills and abilities that ensure continuous development of vocational education teachers. It should also be noted that the methodical character of the competences creates an opportunity to put theoretical knowledge into practice throughout a person's life. From these points, we can conclude that there is no universally accepted meaning of the concept of competence and no single classification of competences.

A similar point of view is expressed in the research of A.K. Markova, that is, competence is a number of issues that a person has the right to solve, taking into account his competences in a certain field, as well as "combining the quality of mental characteristics as a mental state, leading to independent and responsible (effective competence ) is the ability to perform certain labor activities that allows to have it". "Sometimes we hear such statements: it is within my competence (I can solve it), but it is not within my competence (I am not given the competence to solve it)".

The improvement of education envisages the introduction of "basic competence" into the new generation of textbooks based on the updated content of education. The concept of core competence is not sufficiently studied today. For example, the national training program states that all core competencies have the following characteristics: core competencies are multi-functional. If you master them, it will allow you to solve various problems in everyday, professional or social life. It is necessary to have it in different situations, to achieve different important goals and to solve the following complex problems:

basic competence is specific to subjects and interdisciplinary features, which are used not only in school, but also at work, in the family, in the political sphere and in various other situations;

basic competence requires important intellectual development: abstract thinking, self-reflection, self-determination, self-esteem, critical thinking, etc.;

basic competence is multifaceted, that is, it includes various mental processes and intellectual (analytical, critical, communicative and other) skills, awareness of news, as well as "healthy thoughts".

Thus, it is possible to say that the basic competencies are the characteristics that each member of the society can have, use and need in different situations.

Currently, not only the concept of core competence, but also its components are not well implemented in practice, in fact, there are several activities and initiatives in this direction, such as international projects, programs and conferences. In the developed countries of the world, this goal has been implemented by the school for more than a year. In the mid-1990s, the Council of Europe adopted the following list of core competencies that all graduates of educational institutions should have:

competencies related to taking responsibility, participating in joint decision-making, non-violent conflict management, participation in the functioning and development of democratic institutions, political and social skills;

competences related to life in a multicultural society (understanding different understanding, respect for each other, the ability to live with other people of other cultures, languages and religions);

competences that determine the ability to communicate orally and in writing, to know several languages;

related to the emergence of information society, application of information technologies, understanding of their nature, strengths and weaknesses of using information technologies;

competences that fulfill the ability and desire to study throughout their active life.

G. Khalaj, the main proponent of the concept of competence, defined it as a response to the challenges facing Europe (maintaining a democratic open society, multilingual, multicultural, new requirements of the labor market, development of integrated organizations, economic changes, etc.).

The following completely different framework of core competencies was developed and adopted by the UK Parliament:

"Working with numbers" (English employers, taking into account the fact that school leavers do not know how to use tables and calculators, immediately transferred this task to the national education ministry);

"Communication" (native language - spoken and written, foreign languages, choosing sufficient tools and methods for communication, feedback device, that is, the ability to understand the thoughts of the interlocutor);

mastering information technologies;

"Self-introduction" or "self-presentation" (the British believe that a teenager should learn about his future work at school);

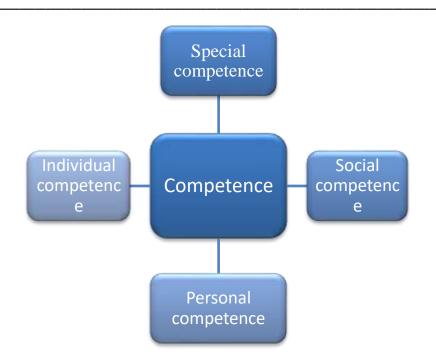
The most important competence is "the ability to solve one's own problems". It is, more specifically, the ability to organize their internal and external resources to achieve goals, as defined by the Cambridge Examination Summary. Internal resources include traditional knowledge and skills. If secondary school graduates are able to organize themselves to achieve their goals, then the role of the British school as a social institution is fulfilled.

A strategic report on the Identification and Selection: Theoretical Framework (DeSeCo) program conducted by the Swiss National Bureau of Statistics in collaboration with the US National Center for Education Statistics and Statistics Canada states that "the identification and selection of competences value this society" and that "individuals, groups and institutions, is considered important from the point of view of institutions.

It can be concluded that each type of competence is a set of knowledge, skills and abilities that ensure continuous development of vocational education teachers. From these points, we can say that the competences based on the cluster approach can fully support the innovative and creative aspects of a person. It should also be noted that the methodical character of the competences creates an opportunity to put theoretical knowledge into practice throughout a person's life. From these points, we can conclude that there is no universally accepted meaning of the concept of competence and no single classification of competences.

Indicators of information competence are objectively a general set of necessary knowledge and skills; the ability to dispose in the performance of their functions; knowing the possible consequences of certain

actions; practical experience; the result of human labor; flexibility of style and critical thinking; as well as professional positions, individual psychological characteristics and acmeological invariants. As a result of research, competence is divided into the following qualities (see Figure 1):



#### Figure 1. Qualities of competence

special competence - mastering special skills-professional activity skills at a sufficiently high level, the ability to plan their further professional development;

social competence - having the professional activity of the association (group, team), cooperation, as well as professional communication methods accepted in the profession; social responsibility for the results of their professional activities;

personal competence - techniques of personal self-expression and self-development, tools of a professional person to resist deformations;

individual competence is self-awareness within the profession and mastering methods of personal development, readiness for professional growth, personal self-defense.

In addition to professional maturity, in interpersonal competence, a person thinks about his own characteristics, qualities, and that he has not one, but several professions.

Tasks related to the problem of forming the teacher's information competence are divided into three groups:

expressing the interests of society;

reflecting the tasks and content of the teacher's professional-pedagogical activity;

express the individual professional needs and interests of the teacher.

A modern lesson cannot be imagined without information and communication technologies. They help to make educational materials more interesting, increase the quality of teaching and the desire to learn by attracting visual images.

Lessons using information and communication technologies have a high variety, the intensity of changing the types of activities is emotional, meaningful, in the form of a game, as a result, it helps to improve the quality of learning materials. Due to the increased mental load in the lessons, it is necessary to think about how to support the students' interest in the subject and their activity during the lesson. The teacher should find ways to make the lesson interesting and colorful, and most importantly, to arouse students' interest in the subject being studied.

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