

TECHNOLOGY FOR THE DEVELOPMENT OF COGNITIVE COMPETENCE OF STUDENTS IN THE INFORMATION AND EDUCATIONAL ENVIRONMENT

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ABSTRACT

In a rapidly changing information society, a person is required not so much to possess a large amount of information as to be able to acquire the missing knowledge using modern information and communication technologies, the willingness to realize his inner mental potential accumulated in the process of learning and self-education, the desire to learn throughout life, improving both professionally and personally.

INTRODUCTION, LITERATURE REVIEW AND DISCUSSION

The pattern of transition to the competency-based model of national education, the traditional model is essentially disharmonious, because instead of holistic sociocultural experience, students actually master only part of it, primarily the knowledge component.

In the conditions of high dynamics of the modern labor market, a person begins to consciously choose an individual “educational path” in accordance with his interests and educational needs. The role and purpose of education is shifting towards satisfying the educational needs of people and accompanying them throughout life.

Analysis of published materials on the problem of modernization of education shows that competencies and competencies are considered as the main units for updating its content.

The categories “competency” and “competence” have been included in the terminological apparatus of domestic pedagogy relatively recently and have become the topic of active discussion after joining the Uzbek educational process.

Despite the fact that large scientific-theoretical and scientific-methodological works have already appeared in which the essence of the competency-based approach is analyzed, the conceptual apparatus characterizing its meaning has not yet been established. The pedagogical literature actively discusses the problems associated with the concepts of "competence", "competence", "key competencies" and the hierarchy of their relationship. There is no consensus on the list of core competencies. The issue of the formation of key competencies and the criteria for their assessment is not resolved.

When discussing the problems associated with the modernization of modern education on the basis of the competency-based approach, the question arises of the place of the competency-based approach in the system of domestic education. The opinions of scientists about the need for a competency-based renewal of education are ambiguous, due to the multidimensionality and differences in the interpretation of units of its conceptual apparatus, the difficulty of integrating a new approach into the existing model of education (or a change in the educational paradigm in general).

In most foreign studies that have appeared in the past few years (D. McClelland, B. Mansfield, T. Hoffman), the concept of “competency” is not interpreted as a set of abilities, knowledge and skills, but as the ability or willingness to mobilize all resources (organized by into the system of “knowledge and skills, abilities, and mental qualities”), necessary to perform tasks at a high level, adequate to a specific situation, i.e. in accordance with the objectives and conditions of the course of action.

Thus, cognitive competence is an integral cognitive competency is an integral characteristic of a person, showing the degree of formation of cognitive processes, components of educational and cognitive activity, aspiration and readiness for constant self-education.

Cognitive competence can be considered as one of the key types of personality competence, as an integral component of other types of competence, as a personality basis for lifelong education. Cognitive competence as a quality of student personality has its own specificity and structure.

Competence is a complex system education with integrative properties. As you know, the integrative properties of an object that arise as a result of the interaction of its components are absent for each element separately and are not equal to the sum of the properties of these components.

Currently, there are different approaches to determining the components of cognitive competence of students. Based on the theory of educational activity V.V. Davydova, A.N. Leontiev, S.L. Rubinstein and the concept of the phased formation of mental actions P.Ya. Galperina, N.F. Talyzina, E.V. Vyazova, as indicators of the formation of cognitive competence, identified the following: the degree of generalization and completeness of knowledge, the degree of coagulation and rationality of skills, the ability to transfer actions performed and the scale of value-semantic orientation.

Studying and analyzing the literature reflecting the stages of the development of the project method as a pedagogical technology made it possible to determine the basic principles for its implementation: - the connection of the project idea with real life; - interest in the implementation of the project by all participants in the project activity; - The leading role of the advisory coordinating function of the teacher; - self-organization and responsibility of project participants; - focus on creating a specific product; - mono-subject and interdisciplinary nature of projects; - temporary and structural completeness of design work.

The following requirements are applied to the application of the project method: - the presence of a problem (task) that is significant in the research and creative plan, requiring integrated knowledge, research search for its solution; - practical, theoretical, cognitive significance of the expected results; - independent (individual, pair, group) activities of students; - structuring the content of the project (with an indication of the milestone results).

We especially note that in modern conditions, project activity acquires a focus on encouraging students to independently understand the phenomena studied, actively forming and critically understanding their own point of view.

Equally important in the context of using the competency-based approach in training is the fact that the implementation of project activities creates opportunities for the integration of knowledge from various disciplines, which gives integrity, systematic organization and

personal meaning to the material being acquired, provides opportunities for the development of students' personal, professional and social qualities, strengthens their interest in the learning process, in the profession, develops independence in decision-making, increases responsibility for It is a training, social and professional activity that forms a psychological readiness for the implementation of individual life models, which determines the willingness to carry out activities in specific professional situations.

Learning technology using the project method to the greatest extent allows you to effectively implement the idea of building the educational process in a university based on a competency-based approach, since:

- helps to increase the personal confidence of each participant in project activities, cultivating such personal qualities as: the pursuit of truth, social justice, goodwill and mutual assistance, morality, empathy, tolerance, democracy, etc .;
- allows each participant to see himself as a capable and competent person, through the development of various types of competence;
- develops for each participant in the project activity a positive image of himself and others, forms a positive "I" - concept, openness and willingness to dialogue;
- develops the ability to evaluate oneself correctly, the ability to control oneself, the ability to self-regulation, etc .;
- in the process of collective work, develops a "team spirit" among the participants, stimulates the development of such a necessary social skill as interpersonal skills and ability to cooperate;
- provides a mechanism for the development of critical, creative, systemic thinking, the ability to look for ways to solve the tasks;
- develops research abilities among participants in project activities (observation, problem identification, information gathering, the ability to hypothesize, analyze, generalize, etc.);
- provides an opportunity to introduce into the educational system a democratic style of relations between teacher and student, teachers of cooperation (the student becomes an equal participant in the educational process), a component of teaching practical skills that organically complements the theoretical knowledge gained.

The subject of our study is information and educational projects, which we consider as a concentrated heuristic means of forming cognitive competence among students, which necessitates determining the essence and structure of the information and educational project.

In modern pedagogical literature, there are various options for the classification of educational projects. Of greatest interest to us is the classification of projects proposed by E.S. Polat [107]. In it, projects are classified on such grounds as the type of activity that dominates the project, substantive areas, the nature of the coordination of the project, the nature of the contacts of the project participants, the number of participants, the duration of the project.

The study confirmed the relevance of the problem of the formation of cognitive competence among students, which helps to increase the effectiveness of students' educational and cognitive activities, the transition to a competency-based education model and the creation of a continuing education system. However, the level of formation of individual indicators of cognitive competence among students remains insufficient to solve these and other problems of modernization of domestic education.

Our study allowed us to draw the following conclusions:

Cognitive competence can be considered as an integral quality of a personality, providing its aspiration and readiness to realize its mental creative potential while successfully solving problematic tasks in the process of learning and other activities throughout life.

The structure of cognitive competence of students includes the following interrelated components:

- motivational-value (formation of internal motives of educational activity, attitude to education as a value, need for self-education);

- cognitive and practical (knowledge of the technology of educational activities, expressed in the ability and ability to independently set a goal, plan, organize, control, evaluate their educational activities; mastery of a particular style of educational activity based on the consideration of individual cognitive inclinations, preferred methods of cognition, selectivity in the choice of educational material; experience of successful independent educational activities);

- emotional-volitional (the formation of volitional self-regulation, a positive attitude to educational and cognitive activity, the ability to objectivity in self-esteem and reflection).

Information and educational projects should be understood as educational projects that are carried out with the use of new information and communication technologies and serve educational purposes. The external result of such projects is a multimedia product (video, Power Point presentation, web page, web site, multimedia study guide, computer newspaper, etc.). The internal result of the implementation of information and educational projects is the experience of creative activity and the level of general and professional development of students.

In the process of implementing information and educational projects, it is possible to form and develop indicators of all components of students' cognitive competence.

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