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A COMPETENCE-BASED APPROACH TO ORGANIZING TECHNOLOGY CLASSES IN GENERAL EDUCATION SCHOOLS

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Abstract: This article examines the issue of a competency-based approach to organizing technology classes in general education schools. It explores the essence of a competency-based approach to studying the technology discipline and a practice-oriented educational process.

Keywords: education, competency, competency-based approach, practice-oriented learning, quality of learning.

A competency-based approach is a pressing issue in all areas of educational organization. It is considered a key component in European countries at the national educational standard level. The primary goal of a competency-based approach in education is to bridge the gap between students' knowledge and their practical activities, and to teach them to effectively solve practical problems using acquired and assimilated knowledge. Therefore, important goals of organizing Technology classes include developing students' ability to act and be successful, and fostering qualities such as professional versatility and the ability to change fields of activity and work methods at a high level.

Such personal qualities as mobility, decisiveness, responsibility, the ability to assimilate and apply knowledge in unfamiliar situations, and the ability to communicate with others are becoming increasingly sought after. The primary outcome of an educational institution's activities should not be a system of knowledge, skills, and abilities, but rather the development of students' ability to act in specific life situations.

An analysis of scientific research by scientists on the issue of a competent approach, competencies, and competence shows the relevance of this problem. The ideas of the competency-based approach as a principle of education are considered in the works of A. M. Aronov, A. V. Barannikov, A. G. Bermus, V. A. Bolotov, I. A. Zimnyaya, G. B. Golub, I. G. Galyamina, V. V. Kraevsky, O. E. Lebedev, M. V. Ryzhakov, Yu. G. Tatura, I. D. Frumin, A. V. Khutorskoy, O. V. Churakova, M. A. Choshanov, V. D. Shadrikov, P. G. Shchedrovitsky, and others.

All researchers who have studied the nature of the competency-based approach draw attention to its multifaceted, diverse, and systemic nature:

- the competency-based approach provides answers to the needs of the production sphere (T. M. Kovaleva) [16];

- a competence-based approach as a generalized condition of a person's ability to act effectively beyond the boundaries of educational subjects and educational situations (V. A. Bolotov) [10];

- "a competence-based approach manifests itself as an update of the educational content in response to the changing socio-economic reality" (I. D. Froumin) [24];

- a competence-based approach is an approach to education in which knowledge, abilities, and skills are supplemented and transformed into a new quality by developed abilities, acquired values, and readiness for various situations of change [17].

In her research on the competency-based approach, L. O. Filatova provides the following definition:

- the concept of competence includes not only cognitive and operational-technological components, but also motivational, ethical, social, and behavioral ones;

- competence means the ability to mobilize acquired knowledge, skills, experience, and behavior patterns in a specific situation or activity;

- the concept of competence embodies the ideology of interpreting the content of education as being formed "from the result" ("output standard");

- the competency-based approach includes the identification of core skills;

- competencies are formed during the learning process not only in school, but also under the influence of the environment, that is, within the framework of formal, informal, and extra-formal education;

- the competency-based approach arose from the need for human adaptation to frequently changing production technologies. Competence is the ability to change within oneself what needs to change in response to the challenges of a particular situation while maintaining a certain core of education: a holistic worldview and values; Competence describes potential that manifests itself situationally and, therefore, can only form the basis for assessing delayed learning outcomes. [24, 9-11]

According to experts, the competency-based approach allows for the integration of research and practical components, as it focuses on enhancing the practical effectiveness of professional education based on fundamental scientific knowledge. The Bologna Process also

presupposes a certain terminological unification. The main categories of the new approach are the concepts of "competence" and "competence," which are ambiguous and difficult to interpret due to their multidimensionality and complexity.

Competence (translated from the Latin competencia) refers to the range of issues in which a person is well-versed, knowledgeable, and experienced.

Competence is defined in the encyclopedic dictionary as "knowledge and experience in a particular activity."

In E. M. Anoshina's research, the concept of "competence" is used to describe the final learning outcome; the concept of "competence" acquires the meaning of "know how," in contrast to the previously accepted benchmark of "know that" [5, 28].

E. Zeer, D. Zavodchikov, and A. V. Khutorskoy view competence as requirements for the level of training of future specialists.

E. Zeer, D. Zavodchikov: "Competencies are generalized modes of action that ensure the productive performance of professional activity" [14, 40].

A. V. Khutorskoy defines competence as a predetermined social requirement for a student's educational preparation, which is necessary for their high-quality, productive performance in a given field. This author views competence as "a student's possession of the relevant competence, including their personal attitude toward it and the subject of activity, that is, the application of competence in activity." [26]

A competency-based approach to education does not negate the idea of acquiring knowledge, abilities, skills, and elements of functional literacy—that is, socially acceptable algorithms for action in typical situations—but allows for the achievement of a different, integrated result of competence.

B. D. Elkonin sees competence as a radical means of modernization [30].

V. V. Bashev characterizes competence as the ability to transfer abilities to conditions different from those in which this competence originally arose [8].

A. M. Aronov defines competence as "a specialist's readiness to engage in a specific activity" [6].

P. G. Shchedrovitsky views competence as an attribute of preparation for future professional activity [29].

The new paradigm has updated the problem of preparing independent, proactive, and responsible members of modern society who can collaborate with each other in solving social, personal, and professional problems. In other words, preparing competent members of society

places new demands on the education system. An approach based on the development of competencies manifests itself in adjusting the content of education in response to changing social and economic realities. The competency-based approach reflects the objective need to educate both knowledgeable individuals and those who can apply existing knowledge in practice [2]. In the context of the "Technology" subject, students become familiar with a range of professions and begin to navigate various areas of social production. The content of technical and technological education within the context of a competency-based approach is determined by four components: knowledge, skills, practical abilities, and experience in valuable relationships (personal qualities). The main differences between a competency-based approach and a traditional approach based on the knowledge component are as follows:

1. The primary outcome of education is not individual knowledge, skills, and abilities (KSA), but the student's ability and readiness to effectively behave in a variety of socially significant situations.

2. Focus on students' reflective assessment of their own abilities and self-awareness of the limits of their own competence and incompetence.

3. Identification of individual needs and abilities in the student.

4. Combination of intellectual, qualification, value, and emotional components of education.

5. The ability to individually assess students, in particular to identify their own educational progress, without comparison to standardized assessment standards.

6. Developing a proactive approach to knowledge acquisition and self-regulation based on a conscious approach to the educational process.

The implementation of a competency-based approach has several distinctive features.

At the substantive level of the educational process:

• Selecting tasks that are meaningful to students, using open-ended questions that do not have a single correct answer, tasks with uncertain outcomes, tasks with excessive information, and contradictory contexts.

• Using situations oriented toward students' existing experiences, aimed at acquiring new practical experience, and having social significance.

At the organizational level of the educational process:

• Implementing an individual educational triad for each student;

• Priority is given to students' independent learning and cognitive activity;

• Opportunity for students to create educational products;

• Expanding the educational space using information technology (primarily the Internet);

• Presenting personal achievements and educational results obtained by students;

• Developing students' cognitive, social, psychological, individual, and collective reflective skills;

• An individualized assessment system that takes into account the capabilities and goals of each student.

At the level of developing personal qualities: developing positive self-esteem, tolerance, and empathy; developing skills for collaboration (partnership) rather than competition; developing the ability to work in a group; promoting creativity and initiative [2].

A competent approach to teaching the subject "Technology" primarily represents a practice-oriented educational environment in the school. With appropriate educational, methodological, personnel, and logistical support, knowledge acquired from the natural sciences and humanities is realized in practical, applied activities. Thus, the purpose of the educational subject "Technology" is to develop a holistic personality, harmoniously combining the requirements for physical and intellectual activity, continuous self-education, and professional and personal self-improvement.

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