

ISSUES OF DEVELOPMENT OF STUDENTS' GRAPHIC COMPETENCES BASED ON INDIVIDUAL APPROACH

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Abstract. *For the personal development of students in higher educational institutions, the acquisition of a professional direction of their socio-personal interests, independent thinking, creativity, activity, the deepening and enrichment of their relationships, the stabilization of their character and outlook, and the formation of their needs for self-education are considered urgent tasks.*

The article highlights the issues of developing students' graphic competencies based on an individual approach.

Keywords: *development, interest, direction, thinking, creativity, activity, preparation, competence, knowledge, competence, activity.*

It is an urgent problem to form a person who fully meets the requirements of the reforms implemented in the society, is resistant to the competition in the production sector, can adapt to sudden changes, and also works effectively at the level of the requirements for the qualifications of specialists in the labor market.

In the studies of P.V. Zuev, L.A. Osadchaya, E.V. Ospennikova [3, 7, 8] dedicated to solving the problem of organizing the individual activities of students, the task of organizing teaching based on an individual approach is based on the classification of students according to the levels of educational needs is solved, which allows the teacher to develop educational and methodological support for the implementation of individual directions of learning activities used in planning student activities. However, the authors did not provide an opportunity to quickly change the direction based on the results of the interim control of the educational content, methods and subsequent rapid correction for expanding and deepening the knowledge and skills of students. Based on the ability to quickly change the content and methods of education, the concept of "individual direction" can be defined as a set of consistently obtained results of educational activities aimed at achieving personally important educational goals. By the formation of an individual direction of learning a subject, we mean the design of educational activities (creating a preliminary plan of activities for the academic period), the implementation of educational activities (consistent collection and collection of educational results), the management of educational activities based on the determination of the conformity / incompatibility of the student's educational results with personally important goals (we understand changing the situation in the initial activity plan).

The personal development of students of the higher pedagogical educational institution is characterized by situations such as the acquisition of a professional direction of their socio-personal interests, independent thinking, creativity, activity, the deepening and enrichment of their

relationships, the stabilization of their character and outlook, and the formation of their needs for self-education.

The urgency of developing students' graphic competencies based on an individual approach is as follows:

- at the scientific-pedagogical level - between the need to provide conditions for the development of graphic competences of students based on an individual approach and the insufficient development of the theoretical and methodological bases of using the information-educational environment for individual education;

- at the scientific-methodological level - it is related to the contradictions between the insufficient development of scientifically based methods of developing graphic competences of students based on an individual approach and the possibility of using the means and content of the information-educational environment for learning.

In foreign countries, mainly in European countries, the level of competence of a specialist takes the main place.

The dictionary meaning of the English concept of "competence" is "ability", but the term "competence" serves to express knowledge, skill, skill and ability.

According to the tradition formed in Western countries, the professional qualification of a specialist is measured by his competence, and the educational system is measured by the level of knowledge, skills and qualifications.

In foreign countries, work is carried out on the basis of qualification standards that reflect only the result to be achieved, embodying specialist knowledge and skills.

If we look at the etymological analysis of the concepts "competent" and "competence", we can understand that they did not arise by chance.

Competence does not mean the acquisition of separate knowledge and skills by the student, but the acquisition of integrative knowledge and actions in each independent direction.

According to the essence of the national state education system of our republic, the minimum requirements of the educational content are based on the following main units: knowledge, skills and qualifications.

In terms of the requirements for the level of professional training of graduates, competence means the ability of students to use a set of knowledge, skills and methods of activity appropriately in certain situations.

Competence is expressed by the student's acquisition of knowledge, skills and abilities necessary for the implementation of personal and socially significant professional activities and their ability to apply them in professional activities. In this place, the essence of the concept of "competence" is fully revealed, it is manifested in the following two forms: competence as a set of personal qualities of students and basic requirements of the professional field.

The main elements of the formation of graphic competences of students are as follows:

- determining the needs of production and creative activity for the purpose of technical development;
- solving design-construction, technical, engineering tasks;
- engineering research, design, construction;
- regulation and operation of technical systems (production);
- innovative activity that requires a systematic approach.

As stated by V.G. Gorokhov [2], graphic activity at the current stage is characterized by a systematic approach to solving complex scientific and technical problems involving the entire complex of social, humanitarian, natural and technical sciences. Development of new forms of design culture, systematic and methodological directions of modern engineering activities, environmental, biotechnological and social problems design and the crisis of traditional thinking related to its extension to the relevant fields leads to access to humanitarian methods of knowledge and development of reality. Environmental protection, ethics of scientists, prediction of irreversible social consequences of scientific and engineering activities - require reconstruction of the traditional way of work and thinking of a modern scientist. This reconstruction "is associated with the development of a broader, systematic approach to the study and design of complex objects, the main requirement of which is the need to take into account various factors and consequences of scientific activity" [2].

As M. Vrajnova [1] noted, the complexity of production and applied technologies inevitably leads to the specialization of engineers working mainly in design or engineering research, or in the field of organization of production and preparation technology. However, "as different fields and types of activity grow differentiated, its integration becomes stronger. To implement it, special specialists - - system technicians are needed" [1]. The author draws attention to the need to develop innovative activities as a condition for economic competitiveness. It should constantly monitor the needs of the enterprise using the accumulated achievements in the field of technology, new systems, ensure the high quality of its facilities, try to be a leader in its production field.

Based on an individual approach, the issues of developing graphic competences of students are characterized by their own characteristics. Due to the fact that the educational content is grouped in the curriculum in the form of blocks of subjects (for all subjects), interdisciplinary (for a set of subjects) and subjects (for a specific subject), we recognize the following three levels of competence:

- 1) basic competence (according to the humanitarian, socio-economic content of education);
- 2) interdisciplinary competence (according to the relevance of general professional training to educational subjects and educational blocks);
- 3) competence in one subject (subject) (according to having a clear and certain opportunity within a special educational subject).

Thus, basic competence is determined at the level of educational blocks and academic subjects for each stage of higher pedagogical education. In determining the order of basic competence, the essence of social and personal experience in accordance with the main goals of professional pedagogical education, the main types that allow acquiring life skills in the process of organizing professional activity in social society are of great importance. From this point of view, they are divided into the following types of competence:

1. Comprehensive competence. It is related to the student's valuable orientations, his ability to feel and understand the social existence, to find an independent way of life, to understand his role and place in the social society, to set a clear goal in the organization of actions and to make decisions, competence related to worldview, he provides a mechanism for self-determination for the student in academic and other situations. The student's individual educational direction and the general program of his life activity depend on this competence.

2. Socio-cultural competence. It is the scope of knowledge and activity experience that the student needs to master in depth, the characteristics of national and universal cultures, the spiritual and moral foundations of human and human life, the cultural foundations of family and social traditions, the role of science and religion in human life, their impact on material existence, life and recreation. knowledge about, for example, knowledge of methods of effective organization of free time is assumed.

3. Academic competence is a set of independent thinking competences, consisting of elements of logical, methodological and social activity of the student related to the specific objects being studied, including the ability to see the goal, plan the activity, analyze its content, reflect, give personal assessment of the activity. and qualifications included. In relation to the studied objects, students acquire creative skills, that is, obtaining knowledge directly from existence, methods of action and heuristic methods of solving problems in non-standard situations.

4. Information acquisition competence. With the help of audio-video presentation tools and information technologies, the skills of independent research, analysis and selection of necessary information, their analysis, change, storage and transfer are formed. This competence ensures that the student learns the basics of academic subjects on the basis of important information.

5. Communicative competence. It includes interaction with students, their methods, mastering the language that takes priority in the communication process, skills of working in groups, organizing and conducting various spiritual and educational activities in the team.

6. Social-active competence in citizenship (citizen, observer, voter, representative), social-labor field (consumer, buyer, customer, producer rights), family relations and obligations, economic and legal issues, professional, as well as personal It means acquiring knowledge and experience in determining one's position (in particular, analyzing the current situation in the labor market, the ability to act in pursuit of personal and social interests, and knowledge of the etiquette of labor and civil relations).

7. Self-improvement competence of a person is aimed at spiritual, motivational, intellectual and practical self-development, volitional and emotional self-control. The student acquires methods of activity according to his personal interests and capabilities, which helps him to develop personal and professional qualities characteristic of a modern specialist, to form his technical thinking, culture and character.

The main elements of competence, which are important in the organization of professional activity, are expressed in the "State Education Standard". At the first stage of the development of the state educational standard, the idea that the educational standards should be the same as the standards of the production sector was rejected. This standard was developed in accordance with the principles that provide for the creation of wide opportunities for education within the framework of the holistic educational process. In this process, the goals and procedural aspects of education were standardized.

It is a pedagogical necessity that this requirement arises in the activities of teachers who do not have basic pedagogical education, who work based on their personal experience and intuition rather than taking into account the characteristics of the educational and educational process.

We believe that it is appropriate to implement the principles of cooperation methodology, such as the ease of tasks, the development of graphic competences of students based on an individual approach, the creation of conditions for success in education, the use of basic schemes

representing the graphic state of the studied subject, and the gradual transition to complete independence in mastering the subject.

In connection with the above, the development of graphic competences of students based on an individual approach is relevant, and its implementation ensures the satisfaction of the educational needs of students in the course of independent educational activities during and after classes.

In the development of students' graphic competencies based on an individual approach, taking into account the characteristics of the subject, as well as the mastery level and individual ability of each student, the following forms are used in the organization of student activities:

1) individual approach to students with the help of educational literature on some theoretical topics;

2) preparation of information (abstract) on the given topic;

3) preparing for seminars and practical training;

4) preparing for laboratory work;

5) perform accounting and graphic work;

6) preparation of qualification thesis and master's thesis;

7) application of theoretical knowledge in practice;

8) finding solutions to existing problems in practice (on the basis of case-technologies);

9) creation of technical layout, models and samples;

10) preparation of abstracts of a scientific article, conference;

11) depending on the characteristics of the taught subject, other forms can be used to organize an individual approach.

Difficulties faced by students in the development of graphic competences of students based on an individual approach, modeling pedagogical and technical-technological problem situations, analyzing the nature of advanced pedagogical experiences, deciding on an individual conclusion, choosing didactic and methodical tools for designing pedagogical and technological processes, and practical implementation of the set goals consists of choosing actions. Serious preparation for pedagogical and technical-technological design of activities, active participation in practical games and technological operations, evaluation of colleagues' answers, as well as organization of test lessons allow to overcome such difficulties [4].

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