

FOSTERING PROFESSIONAL COMPETENCIES OF STUDENTS FROM TECHNICAL AND VOCATIONAL COLLEGES

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Abstract

The model of competencies incorporates a set of competencies related to solving organizational, technological and production tasks in professional activities. It should prepare based upon modern approaches to work, knowledge about the basic methods used to organize scientific research and management of innovative activities. If future specialists are able to update their knowledge and the way in which it is applied on a regular basis, are willing to make decisions, to design and outline their development, it will enhance the level of professional competence. Professional competence is formed through learning special knowledge, mastering professional actions, social relations, intellectual abilities and being ready to show one's personal qualities. This requires identifying methodological approaches and principles to ensure the integrity and balance of a continuous educational process aimed at making the capabilities of specialists match better the requirements of their future occupations.

Keywords: professional competency, modern methodological approach, specialist, educational process.

INTRODUCTION

The main goal of higher professional education is to prepare a competent specialist, mobile, active, proactive, ready for effective independent solution of professional tasks in any conditions. A competent specialist is characterized by the formation of general cultural and professional competencies. Despite a fairly broad study of the ways, forms, methods and other aspects of the organization of students' independent work, there are no works on the problems of increasing its role in modern education and the conditions for organizing independent work in solving the problems of forming professional competencies.

The professional sphere of any activity of a modern person is characterized as dynamically changing, which, of course, is reflected in changes in the requirements for a modern specialist, graduate, professional. The leading factor in the development of modern vocational education is the transition from knowledge-based target settings to settings for the formation of the ability and willingness of specialists to effectively and independently solve professional problems in various situations as part of the implementation of a competency-based approach [1].

DESCRIPTION OF PROFESSIONAL COMPETENCIES

The concept of "competence" was primarily used as a definition of the success of people in connection with personal qualities, and not in connection with a set of knowledge that does not always provide a guarantee of success for a specialist [2].

The totality of the acquired competencies integrates professional competency as the personal quality of the

graduate - the future specialist. This is proved by the fact that in pedagogical literature professional competence can be analyzed in two aspects:

- 1) As the goal of education, the goal of training;
- 2) As an intermediate result characterizing the condition of a specialist carrying out his professional activity.

Professional competence, as a multifactorial, integral characteristic of a specialist's personality, ensures high quality of labor activity on the basis of knowledge and skills, possession of ways to carry out activities [3].

In the first approximation, professional competence is understood as the ability of a specialist to use scientific and practical knowledge in the field of professional activity, possessing a wide general and special erudition, constantly improving his scientific and professional training, demonstrating the ability to independently set and solve new professional problems, to show a high degree of professional adaptation.

In the structure of professional competence, it is necessary to distinguish the following structural components:

- Motivational-value, reflecting the personal attitude of the future specialist to professional activities, his motivation for professional work and training, his personal goals and interests. A positive emotional background and attitude, the manifestation of an adequate reaction to luck and failure, emotiveness, as a value awareness of the role and importance of professional activity, a positive attitude to professional self-development, self-education, self-improvement are manifested in the emotional-volitional activity of a person [4];
- Cognitive, including knowledge and understanding of the content of competence, its relationship with other components, competencies, future professional activities;
- Activity, reflects the level of skills formed by future specialists, such as: general professional (training, communicative, reflective, etc.) and special (practical skills, the use of modern technologies, methods for solving educational and professional problems of various difficulty levels), as well as the presence of the ability to effectively apply existing skills, need and willingness to further development, improvement in professional activities;
- Personal, consisting in the totality of individual psychological characteristics that affect the individual style of training, activity, pace, preferred forms and methods of activity; the nature of the interaction with students and teachers;
- Reflective, reflecting the ability of introspection, self-control, self-assessment of training and development, the effectiveness of the formation of professional competence.

The professional competence of a future specialist is a component of professional competence, as an integrative personal quality that characterizes a graduate who is ready to realize his potential in professional activity. The most important indicator of the professional competence of a specialist is his ability to independently solve problems determined by the conditions of real professional activity. The effectiveness of the formation of professional competencies in general and all its structural components is determined by the subjective position of the student, since his active, motivated, focused cognitive activity is the main factor of success. The determining value of the subjective position of a student in vocational education is the student's independent cognitive activity. Activization and stimulation of the cognitive independence of students, and above all within the framework of independent work, is a priority area of modernization of the learning process in higher education.

The development of the student's personality as a professional in the future is due to the development of his independence in the present, since the professional in his activity is active, able to independently find problems, choose a solution, bear responsibility, take initiative. These professional qualities can only be formed if independence is developed. Therefore, from the point of view of the normative basis of higher professional education, psychological and pedagogical approaches to the organization of independent work and social requirements for the personality of a modern specialist, the role and importance of independent work in the process of professional training, which is the leading link in the student's training and the leading mechanism for the formation of professional competencies, is confirmed [5].

INTERDISCIPLINARY INTEGRATION - THE BASIS FOR THE FORMATION OF PROFESSIONAL COMPETENCE

The formation of professional competence of a future specialist of a technical university is unthinkable

without contextual training and the use of interdisciplinary communication. Since contextual training involves modeling of professional and social components of future engineering activities, and interdisciplinary integration, in turn, acts as a unifying link in the knowledge of various fields of science.

A modern graduate - a future technical professional - must be capable of the integrated application of knowledge of various disciplines in his professional activity. The ability to apply knowledge of different disciplines in aggregate, the ability to transfer ideas and methods from one science to another will be the key to successful preparation of students for future professional activities.

Interdisciplinary integration allows you to get better results if you use common educational technologies in teaching disciplines of various cycles. For a technical university, active and interactive teaching methods involving the use of complex computer programs and specialized laboratory equipment are especially important.

Interdisciplinary communication of individual disciplines of the educational program cannot be the only goal, a single holistic approach is important, with the help of which the idea of interdisciplinarity will be implemented in the entire educational process. Interdisciplinary integration of professional training of university students plays a major role in improving the quality of scientific, theoretical and practical training of students, because when applying the interdisciplinary approach at each stage, the tasks of implementing not only the educational program, but also the development and education of modern students are solved [6].

CONCLUSION

Through the prism of professional competence, the foundation is laid for all graduates to comprehensively solve problems arising in reality. A universal, creative, developing personality of a future professional can be formed only under the condition of an inextricable pedagogical process, each stage of which is built on the same principles and methods and is aimed at the ultimate goal - the professional competence of an engineer. That is why interdisciplinary integration is an important condition for the training and education of students of technical universities.

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