

# Forming competences of students in educational process of a higher education institution

## Formación de competencias de alumnos en proceso educativo de una institución de educación superior.

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#### ABSTRACT:

In the context of modernization of higher education competence approach is considered one of the important conceptual provisions of updating the content of professional education, the purpose of which is to improve the quality of the educational process. However, the implementation of the competence approach in the educational process of universities, in our opinion, is still having problems of first-rate importance. Our research is aimed at solving these problems.

**Keywords:** Competence, technologies of education and training, interactive technologies, student government

#### RESUMEN:

En el contexto de la modernización de la educación superior, el enfoque de competencia se considera una de las disposiciones conceptuales importantes para actualizar el contenido de la educación profesional, cuyo objetivo es mejorar la calidad del proceso educativo. Sin embargo, en nuestra opinión, la implementación del enfoque de competencia en el proceso educativo de las universidades sigue teniendo problemas de primera clase. Nuestra investigación está dirigida a resolver estos problemas.

**Palabras clave** Competencias, tecnologías de la educación y la formación, tecnologías interactivas, gobierno estudiantil.

## 1. Introduction

In the context of modernization of higher education competence approach is considered one of the important conceptual provisions of updating the content of professional education, the purpose of which is to improve the quality of the educational process. Over the years, the main professional educational programmes continue to be focused on the further implementation of the competence approach in the educational process. It is known that the modern state educational standard of the higher education is directed on formation of general cultural, all-professional and professional competences of the teacher.

A graduate of a university is expected to become a specialist able to solve complex professional problems and to use modern technologies, possessing basic scientific knowledge and skills, focused on continuous self-development and self-improvement, ready to engage in innovative processes and responding to changes in society adequately.

However, the implementation of the competence approach in the educational process of universities, in our opinion, is still having problems of first-rate importance. Among them are the creation of the necessary conditions for the active inclusion of students in practical activities, the formation of a positive motivation of students to participate in vocationally-orientated activities, the readiness of the teacher to use the priorities and potential of education and to create a sociocultural environment of a university. Our research is aimed at solving these problems.

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## 2. Methodology

The study uses a set of methods: analysis and review of literature, observation, survey, testing, conversations, design, modeling and a number of others.

The methodological basis of our research includes the competence approach, the subject-activity and professionally oriented approaches to the organization of training and education of future specialists.

The methodological concept of the competence approach in vocational education developed by a number of scholars: V. V. Kraevskiy, A. V. Khutorskoy, E. F. Zeer, V. I. Zagvyazinskiy, A. F. Zakirova, T. A. Matveeva, G. K. Selevko, A. P. Tryapitsyna etc. It implies that students reach «a sufficiently high level of knowledge, experience, information awareness for the implementation of activities and communication in various fields and areas» (Zagvyazinskiy, 2008). The basic competences include multi-functional, interdisciplinary and trans-disciplinary competences: general scientific, socio-economic, civil law, information and communication, polytechnic and general professional competences. The ability of a person to use his/her competence in practice in modern researches is viewed as a set of competences, as «generalized methods of actions that ensure productive performance of professional activity» (Zagvyazinskiy, 2008). Educational competence (according to A. V. Khutorskoy) is «a set of semantic orientations, knowledge, skills, abilities and experience of the student in relation to a certain circle of objects of reality, necessary for the implementation of personal and socially significant productive activities» (Khutorskoy, 2003). Competences of a wide range of uses, having a certain versatility, are called key ones.

E. F. Zeer distinguishes three groups of units for updating the modern content of education: "competency, competences, educational and socio-professional qualities (or «meta-quality - is the personal abilities, characteristics, properties that determine the productivity of a wide range of educational, social and professional activities of a person»). He asserts that «cognitive and activity paradigms of education should be replaced by competence-context and personality-developing education with a set of training, upbringing and development technologies adequate to the competence approach» (Zeer, 2007).

T. A. Matveeva, analyzing the conceptual framework of the competence approach in vocational education, stresses that its implementation in a higher education institution «requires an appropriate organization of the educational process, the changing role of the teacher, having knowledge of the relevant pedagogical technologies in which the emphasis is on methods that stimulate learning by doing, integration, exchange of experience, creative solving of problems... The competence approach enhances the practical orientation of education, its pragmatic, subject-professional aspect» (Matveeva, 2007).

The modern conceptual apparatus, which reveals the essence and content of the educational process and professional activity in a university, focuses on the recognition of the priority of a particular phenomenon or direction and does not deny that in the development of education it is very important to achieve harmony, interoperability and interaction of different parts, elements, trends. In a study of the educational process it shows itself in the comparison of the main related concepts: education, training, development – they are closely related and interacting; they reveal, complement and reflect the different areas of

the professional activity aimed at personal development. We evaluate these concepts only from the standpoint of equivalence and equality of their interaction.

For example, in the context of their priority the goals of education are prior to the means of its implementation, the developing and educational effect of training is prior to the learning particular elements of knowledge and the humanist-oriented approach to reforming the content of education is preferred to the technocratic approach. At the same time, it is extremely difficult to raise the question of priorities in semantic pairs so meaningful for education, such as: individual – social, personality – group, theory – practice, creativity – algorithmization, figurative and logical in cognition. Emphases are often temporary or situational by character. Their statement is proved by the necessity to decide versatile professional tasks of specialists' training that is connected with the use of innovative technologies of modern training and education. Therefore, in practice while organizing educational process in a university it is always necessary to remember that training should be directed on upbringing and upbringing should be educative, aimed at the development of the personality. This is the condition under which modern education becomes a value that can ensure the integration and harmonious development of the student's personality.

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### **3. Results**

In modern conditions it is necessary to improve the organization of the educational process in higher education institutions, to review the existing experience from the standpoint of the competence approach, which is one of the most important conceptual provisions of updating the content and technology of higher education. It is crucial to pay special attention to the individualization and differentiation of the development of the personality of each student.

The Federal state educational standard of higher education emphasizes that working out basic professional educational programs must include defining pedagogical conditions and opportunities provided by a university for the successful formation of the competences of students. For example, a graduate of a master's program, on the one hand, must have professional competences corresponding to the following types of professional activities: teaching, research, design, methodological. That is, a graduate of a university over the years of study should form the ability to develop and implement the latest techniques and technologies for the organization of the educational process (education, training and development), to be ready to analysis and self-analysis of the results of the process, their use in educational institutions. On the other hand, a graduate of a university should become a competitive specialist, ready for self-realization in professional activity.

In this regard, it is important to talk about applying the technological approach in education, which is based on teachers' mastery of pedagogical technologies and their use in the educational process to achieve high efficiency of pedagogical activity. Pedagogical technologies of higher education make a field of Pedagogy connected with professional training and formation of the future specialist possessing competence, creative abilities, developed thinking, professional culture and mobility. The use of pedagogical technologies helps to improve the efficiency and quality of education, the formation of the competences of students - future specialists. At the same time the level of proficiency in pedagogical technologies characterizes the professional competence and pedagogical skills of a university teacher.

The task of higher education is to train specialists with high professional potential and personal integrity, capable of going beyond the normative activities, ready for continuous creative endeavor, professional growth and self-development, easy to adapt to modern fast-changing life. In this regard, it is necessary to focus not only on educational standards, but also on the peculiarities of the socio-economic situation, to have experience in public life. A university should form a socio-cultural environment and create the conditions necessary for the comprehensive personal development of students. A university must facilitate the development of social and educational component of the educational process, including the development of student government, participation of students in public organizations, sports and creative clubs, student scientific communities, volunteer activities, etc.

The distinctive feature of functioning of a modern university should be the students'

involvement into the educational process, achieving the subjective position by the student. Turning to the results of the study (Martishina, 2016). We can note that students call learning the main activity and try to show their abilities, especially while in-class learning. Regarding the leading motive for the use of additional educational resources in training, most of the respondents reported that they consider the study material important for the future profession (86%). 34% of respondents thought it was essential to get a new interesting experience. 17% of respondents reported that the main motive for them was to fill in the portfolio of educational achievements, 26% of respondents studied to pass the credit (Grechushkina, 2015).

However, activity, initiative and energy do not allow students to become obsessed with studies. They find it interesting to take part in volunteer activities (37.3%), as well as attend classes in creative studios, sports sections, clubs (38.5%), of which the University has a large choice. Equally (29.4% each), students are interested in scientific research and extracurricular activities (Martishina, 2016). These circumstances are important for a teacher to consider while organizing pedagogical interaction in a higher education institution.

Innovative education is designed to adjust the main differences between traditional training and upbringing, which lie in underestimation of the leading role of the subjects of pedagogical activity, the priority of knowledge over the skills, underestimation of the impact personal attitude has on the performing activities and their effectiveness. In our opinion, it would be interesting to study the experience of curator activity in RSU named for S. Yesenin (Ryazan). It demonstrates the effective use of pedagogical technologies supporting the formation of students' competences. In recent years, attention has been focused on the use of interactive technologies.

'Interactive' means involving communication between people, designed to involve a person into interaction. Interaction in education is considered a way of cognition, carried out in the forms of joint activity of students. All participants of the educational process interact with each other, exchange information, solve problems together, simulate situations, evaluate the actions of colleagues and their own behavior, immerse in a real atmosphere of business cooperation to solve problems. The teacher develops the plan of an interactive lesson, its course, thereby building the student's way to achieve a certain goal in education and upbringing. Interactive learning is learning with well-organized feedback, based on the active student-teacher interaction (Selevko, 2006). Interactive upbringing involves interaction, joint activity and humane relations of the teacher with students in the holistic pedagogical process of a university in order to form a harmoniously developed personality of a prospective specialist. In modern conditions, the importance of interactive technologies in the educational process is steadily increasing, and this proves the feasibility of their use in the training of specialists with different specialization.

Interactive technologies are based on broad cooperation and collaboration between teachers and students, as well as their more active interaction with each other. The use of interactive technologies allows not only to reproduce in the educational process a variety of job and personal roles, but also to grow into them, creating a future innovative model of communication of people at work. All this allows to bring students as close as possible to active collective actions, to let them experience success, motivate their behavior and be ready for interaction in their profession. To resort to interactive technologies as a means implies modeling of life situations, using role plays, collective solving problems on the basis of the analysis of the proposed circumstances and practical tasks. The needs, interests, ideals, values of the student's personality and creation of necessary conditions in which its propensity, abilities and talents would be most fully revealed are brought to the forefront. Scientists of the pedagogical scientific school of Herzen State Pedagogical University of Russia (St. Petersburg) believe that the successful application of pedagogical technologies depends on the adequate choice and integration of educational technologies: the technology of organization of students' independent work on the content and new forms of higher education (organizational technology, technology of module-rating training); the technology of students' inclusion in various activities (project work, creative activity and scientific research); the technology of work with different sources of information (information technologies, distance learning, problem based learning, technology of critical thinking);

technology of group interaction (technology of group work modeling, technologies of interactive forms of education, etc.); technology of meta-cognitive activities of students (technology of reflexive learning, technology of achievements assessment (portfolio), the technology of self-control, the technology of self-education activity); the technologies of context-based learning (analysis of specific situations and solving pedagogical tasks, simulation games etc.) (Akulova, 2006).

Let us consider the feasibility of using such technologies on the example of the traditional annual contest «The Curator of the Year» held in our university. In 2017 educational programmes of the contestants included working out and public defense of programs of interaction and group activities of the curator and students using the technologies of project work, creative and research work. The selected topics of the projects, in our opinion, were relevant («We Are United by Friendship of Peoples: Russia – China», «Ecology in the Soul», «Traditions of the Faculty», «To Manage Time Is to Manage Life», «Get to Know Your Teacher», etc.), and provide the formation of key competencies of future professionals aimed at identifying and developing professional and personal qualities of students and improving the professional skills of the curator. The programs of the contestants include arranging and running a variety of collective and individual forms of educational activities for students: dialogues, discussions, round tables, master classes, case-studies, solving educational problems, games, etc.

The curator, working with the study group of students during their first and second years in a university, is to perform most difficult tasks of former schoolchildren's adaptation to the educational process in high school, of formation their positive motivation for the future profession. For example, a curator Vodorezov A.V., working with students of the training programme «Pedagogical Education» with specialization «Biology and Geography», implements his original programme based on integration of educational and extracurricular upbringing activities. He follows the traditions of The Department of Natural Science and Geography and offers the developed system of actions according to dates of «ecological calendar».

Each student is included in socially significant actions, research, forwarding and volunteer activity, can see the results of his/her work. Students can show their creativity by creating scenarios of TV program «Habitat» on the air of «9th channel», as well as texts for publication in newspapers and online publications. «Scientific Evenings» as a special form of interaction of students with teachers of the chair became a tradition and a platform for developing students' research competences. A. V. Vodorezov specifies that the five-year experience in this program proves its effectiveness, as graduates are in demand in their profession, half of them, initially not associating their future with scientific work, at the time of graduation were involved in scientific researches and had scientific publications.

The experience described above shows that it is necessary to use pedagogical technologies that form the subjective position of students and give them a possibility of inclusion in social practice. In innovative training and education these technologies include interactive forms of work.

Development of student government is an important condition necessary to fulfil the modern requirements to education. The democratic nature of education management is stated as a principle ensuring the realization of the rights of students to participate in the management of educational organization (clause 3 RF Federal Law "On Education in Russian Federation", 2012) (RF Federal Law, 2012).

However, the meaning of student government is not to include students in the work of the current management system, but to enable them to acquire personal managerial and organizational experience, to be authors creating democratic relations. The Federal state educational standard of higher education assumes that within any educational program teachers interact with their students in such a way, giving them opportunities to show themselves. Success in educational and extracurricular activities in high school helps students to gain confidence in their abilities, to reveal their potential, which is very important in the formation of professional and personal qualities.

Self-government should be considered as «a specific organization of collective activity, based

on the development of independence of participants in making decisions and acting to achieve significant collective goals» (Greibenkina, 2008). The system of student government is not a formal creation of any governance boards; it must be created in teacher-student interaction. It «grows» around the joint preparation and implementation of specific tasks, events, projects. This is possible on the level of a study group. For example, in the organization of training sessions or extracurricular forms of work there can be used the technology of collective creative activity, which involves interaction of all participants at all stages of its preparation and performing. The teacher can as well invite students to join the educational process as active participants - authors of projects on the subject of the training course. The system of student government involves the inclusion of students in the activities of various associations of their choice. It is important that the sociocultural environment of a university should provide students an opportunity to fulfil themselves in a variety of activities: science, art, sports, social life. Examples of significant professional communities, initiated by profiling chairs are the pedagogical team, the student scientific society, the legal advice office, the editorial board of the student newspaper, etc., In such organizations the interaction between the teacher, a member of professional community, and students getting professional experience is necessary. The combination of leadership and subordination, of obligation to perform certain work and creativity and self-expression is the basis on which student government is formed.

Student government fulfils some important functions. The actual student government creates most comfortable conditions for personal development. It helps young people to master their management culture and to realize their personal responsibility for the results of the job. All of these things are formulated in the contents of competences and can't be mastered while in-class learning only.

Modern demands on university functioning imply that young people are true brainchildren, who devise and organize concrete activities aimed at solving important social issues and guaranteeing the highest quality of university education. Pedagogical technologies are the means an instructor can use to meet the demands mentioned above.

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## **4. Conclusions**

The research results show the necessity of creating conditions for effective forming competences of students important of which are developing the subject position of students and instructors, implementation of the activity approach focused on students' involvement into vocationally-orientated training, full use of innovative educational technologies and sociocultural environment resources of a university.

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