

POSSIBILITIES OF INNOVATIVE TEACHING METHODS IN PROFESSIONAL COMPETENCE DEVELOPMENT

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Abstract. *The article covers the issues of clarifying modern approaches, principles and leading factors to the theoretical and methodological foundations of the development of professional competence of pedagogical personnel, developing requirements for the content and level of professional competence of pedagogical personnel of higher educational institutions in the context of educational modernization, improving and introducing didactic mechanisms based on acmeological and andragogical approaches, scientific-theoretical*

Keywords: *professional competence, pedagogical personnel, methodological basis, acmeological and andragogical approach, innovation, interactive technology, mechanism, principles, pedagogical personnel, design.*

Introduction. One of the modern trends is to ensure the quality and competitiveness of higher education institutions by developing the professional competence of personnel in the world. In the context of the concepts of "Sustainable Development Goals (SDGs)" and "European Higher Education Area" (EHEA) adopted at the 70th anniversary session of the UN General Assembly, "introduction of the competence-based learning model in personnel training and development, humanization of education on the basis of improvement of the mechanisms of continuous development of professional skills" was defined as one of the strategic directions. This ensures the integration of foreign advanced systems of professional competence development into the management and educational process.

In the world education system, scientific researches aimed at improving the mechanisms of development of universal competencies of leaders and pedagogues, expanding corporate education and coaching services based on the principles of modern quality management, creating intellectual information systems for increasing the innovative activity of personnel, and forecasting the system of modern professional competencies based on the Forsite methodology are being carried out. The research strategy for improving the mechanisms of professional competence development of managers and pedagogues of higher educational institutions is aimed at the scientific and practical solution of the issues of improving the mechanisms of professional competence development based on acmeological and competence approaches, modernizing the forms and methods of developing professional competence oriented to innovative activities, and individualizing the content of professional and pedagogical education. .

In the processes of improving the quality of higher education, ensuring the integration of the personnel training system with the priority areas of science and technology development in our country, special attention is paid to the continuous development of the professional competence of pedagogues. In the action strategy for the further development of the Republic of Uzbekistan, "on the basis of the introduction of international standards for the assessment of the quality of education and teaching, to increase the quality and efficiency of the activities of higher educational

institutions, to stimulate scientific research and innovation activities, to create effective mechanisms for the implementation of scientific and innovative achievements" tasks are defined.

In modern conditions, the increasing role of education in the development of human capital, social and professional competence of personnel, in turn, determines the following factors:

- human capital (motivation, knowledge, experience and skills), the quality of professional training does not fully correspond to the requirements of the innovative economy;
- the increase in the demand for the development of social and personal qualities along with the professional competence of personnel in the new economic conditions;
- that the processes of globalization include education, culture, science along with economy and politics, the prospects of education development are directed not only to the single European area, but also to the global integration of education, which, in turn, leads to new issues such as mobility, creativity, independent education, openness to innovation among specialists. creating a need for the development of professional competences;
- the formation of modern paradigms in education, the creation of an effective technology for the formation of an internal desire for the ready transfer of knowledge to its assimilation in an information society, mutual cooperation of the content and methodology of professional education, project-based training, mutual integration of innovations in science and education, a wide range of individual-oriented and competency-based teaching models introduction.

In the Strategy of Innovative Development of the Republic of Uzbekistan in 2019-2021, further improvement of the quality of teaching in educational institutions by introducing new educational programs, modern pedagogical technologies and smart technologies into the educational process (organization of electronic modules and introduction of distance learning), network and regional economy in order to develop proposals for scenarios, to establish foresight centers in leading higher education institutions as a separate link of the system of forecasting the development of innovative activity, to ensure scientific and technological forecasting of the internal and external environment of the higher education institution, to improve the educational system of developing their technological and innovative environment and priority innovative directions and It is based on the fact that it is an important condition for the development of human capital [1].

This, in turn, requires the introduction of innovations in the educational system, including the introduction of modern, interactive and creative methods of teaching and the development of innovative educational programs that help to improve the quality of education by directing them to the field, and the modernization of the processes of developing the professional competence of pedagogic personnel of higher educational institutions. In our opinion, modernization of education is a fundamental improvement of the education system, based on the priority tasks of the socio-economic development of the country, a fundamental revision of the content of personnel training and professional development, ensuring the creation of necessary conditions for the training of highly educated specialists in line with international standards, as well as science and technology is to create an innovative system of diversification of educational services based on transfer.

Researcher N. In his scientific research, Muslimov considers the following main tasks to be fulfilled in the content modernization of higher education [2]:

- to create a healthy creative environment in educational institutions, to raise the quality of teaching to a new level by introducing advanced innovative, pedagogical and information

technologies into the education and training process, to develop the worldview, thinking, and independent observation skills of students and young people;

- to identify and nurture the abilities and talents of gifted students and young people, to form a unified national system for the full realization of their talents, to create scientific bases for the individualization and differentiation of the educational process;

- optimization of the scope and size of educational loads by integrating related subjects in the curricula;

- expanding the scope of scientific research in the field of pedagogy, opening a wide path to research on pedagogical diagnostics, individual approach to the personality of the student, introducing a mechanism for their comprehensive support, etc.

Researcher B.Khodjaev, in his scientific researches, considers the modernization of education to be the basis of the state's policy in the field of education, and as a social and national task, it is the introduction of changes and innovations to all components of the overall educational process. He explains that the modernization process is carried out taking into account the interests and needs of the state and society, students and teachers, parents and the general public [3].

The researcher, P. Lutfullaev, in his scientific research, focuses on ways to ensure quality and accountability in foreign higher education institutions, emphasizes globalization as a product of continuous change and development in higher education, and internationalization as a response to the needs and requirements that exist as a result of the globalization of society, politics, economy, and the labor market. The division understands as a systematic and supporting action [4]. Competence-oriented education was proposed by the American linguist N. Chomsky (1965, University of Massachusetts). The researcher distinguishes between the concepts of language knowledge and competence. By knowledge, we mean the language system, and by competence we mean the ability to use the language in specific situations, and the concept of "competence" is the theory of language. , proposes as a concept related to transformational grammar[5].

SCIENTIFIC RESEARCH METHODS.

From the above empirical analysis, we can conclude that professional competence is a complex set of individual characteristics and conditions. It is the embodiment of knowledge, skills and experience in a certain field, which allows a person to express his opinion on certain issues, participate in the development of certain decisions or make decisions himself.

It can be seen that two important aspects of professional competence are the level of theoretical and practical training, which is determined by the sum of knowledge and experience that ensures the successful performance of professional tasks.

It is self-evident that the development of the level of professional competence of pedagogues is formed on the basis of the basic professional training they received in a higher educational institution, in which the quality of education, orientation to the field, mastered professional competences, and their interrelationship and coherence with the requirements of real professional activity are considered necessary conditions.

Based on the analysis, it was confirmed that it is appropriate to take into account the following indicators of the effectiveness of professional activity, process-specific indicators, indicators of the development of professional communication and the indicators of a mature specialist in the process of designing the professional competence of the leaders and pedagogues of higher educational institutions (6)

Based on the mentioned aspects, modern requirements for the professional competence of pedagogic personnel, advanced foreign experiences and the study of the pedagogical-psychological aspects and conditions of the development of professional competence, as well as relying on the diagnostic conclusions of the possibilities of higher education institutions in this process, it was determined that the development of the professional competence of pedagogic personnel takes place at the following levels : axiological-motivational, conceptual, technological, reflexive and creative levels.

One of the important aspects that serve to develop the professional competence of pedagogues is the adaptability of educational content and information-methodical provision.

Technologies in adaptive teaching – are considered teaching tools that take into account the goals, interests, and life experience of adult subjects, and at the same time, they are based on the principle of their creative approach to the educational process, inter-modular integration, adaptation to social experience, intellectual level of methodical adaptation. This technology includes the following:

- practical importance of educational materials;
- provision of approaches based on the integration of science, education and technology;
- practical educational environment;
- research-oriented education;
- problem statement, graded assignments, trainings, project education and others.

One such model is the educational system called "Blended learning". Blended education system is a combination of traditional education system and distance education system. In this case, distance education (e-learning) serves as a supporter of the traditional education system and increases its possibilities.

Trainings have great potential for professional and personal development of the future specialist.

Training - (from the English language training-train - to teach, educate) is the main form of conducting interactive exercises, it is an organizational event that provides the opportunity to learn the theoretical ideas and ideas that need to be studied during practical work and exercises, and to exchange dialogues.

Another effective method for determining the professional competence of teaching staff is SWOT analysis.

SWOT-analysis - analysis of existing theoretical knowledge and practical experience, finding ways to solve the problem by comparison, serves to strengthen, repeat, evaluate knowledge, to form independent, critical thinking, non-standard thinking. In this, any idea, experience, situation or process is considered in 4 directions: strength - strong sides, weakness - weak sides, opportunity - possibilities, threat - obstacles.

Portfolio - (Italian portfolio, English folder for documents) is one of the modern educational technologies that serve to authentically evaluate the results of educational and professional activities. A portfolio represents a collection of selected educational and methodological works, professional and personal achievements of a future specialist or teacher.

For educational activity in higher educational institutions, it is possible to use such types as: student portfolio, graduate, doctoral student, student portfolio, etc., for pedagogical activity, teacher's portfolio, staff manager's portfolio (7).

Summarizing the above ideas, it can be emphasized that the application of innovative educational technologies to the educational process of higher educational institutions is one of the most important tasks facing the industry today, which includes normative, stylistic, material and technical support of the educational process, human resources, and the skills of mastering innovations and, of course, the professional knowledge of students. It is appropriate to pay special attention to the development of cognitive activity for occupation.

Interactive methods are an effective type of innovative teaching methods in vocational education.

The interactive method serves to activate the assimilation of knowledge and develop personal qualities by increasing the mutual activity between students and the teacher in the educational process [8].

Pedagogical and psychological basis of interactive methods is presented by the authors J.G.Yoldoshev and S.A.Usmonov conduct research in connection with the following theories: the theory of constructivism (J.Dewey), the development of this intelligence (J.Piaget), the area of closest development (L.S.Vygotsky), the diversity of intelligence (G.Gardner) and taxonomy of learning objectives (B. Bloom).

Indeed, the use of interactive methods helps to form and develop the student's cognitive and emotional skills in the educational process.

Interactive teaching is a special organizational form of the development of cognitive activity, which is characterized by the transformation of the teacher-in-training from an object into a subject of cooperation and active participation in the learning process.

Interactive methods of teaching are considered in modeling life situations, using role-playing games, solving problems together. Based on the results of the observation, it was determined that interactive teaching methods have the following capabilities in the process of developing professional competence in retraining and advanced training courses (Table 2).

2- Table

Possibilities of innovative teaching methods in the development of professional competence

Innovative teaching methods and technology	The role of professional competence in development	A developmental goal	Type and form of application
"Assessment" method	allows monitoring the acquisition of professional knowledge, skills and abilities, determining the dynamics and quality of professional training.	develops critical thinking, analysis and synthesis, creativity skills, cognitive activity, reflection.	It is advisable to use it in theoretical, practical and seminar classes, in the course of training, in practice.
"Simulation or business role-playing" method	It helps to form a creative approach to professional activity, to decide on an active approach and to increase psychological preparation.	Cognitive activity, pedagogical improvisation, develops sociability and gnostic abilities.	It is recommended for lectures, practical, seminar classes and mixed classes, organizing educational

			activities outside the classroom.
Case-study" method	research, creativity, professional forms knowledge acquisition skills by finding solutions to abstract situations.	Develops observation, fairness, correct perception of reality and creative imagination, cognitive skills.	Knowledge reinforcement, monitoring and evaluation can be used in practical, seminar and independent learning.
"Fan" technology	It helps students to find solutions to problems in the opposite direction, to understand the scientific and theoretical foundations of the subject, and to organize knowledge.	Develops analytical and critical thinking, activity of scientific knowledge, clarification of abstract concepts, mastery, attention and memory.	Can be used in small groups, pairs and individually in practical, seminar and laboratory sessions.
"POPS formula" method	It helps to improve the quality and efficiency of the students' professional knowledge development, to evaluate the results of their activities through free feedback..	develops critical thinking skills, interactive attitude in the training process, skills of being able to put the professional position correctly.	It can be used in the form of group work in practical, seminar classes, as well as in mixed, reinforcement, assessment classes.
"Labyrinth" technology	The analysis of professional knowledge, problem issues, exercises, and situations helps in the formation of professional skills.	Develops logical thinking, cognitive activity, scientific research skills.	It is recommended to use in independent education in lectures, practical and seminar classes.
"Grinder" technology	teaches independent thinking, self-assessment, respect for other people's opinions, strengthening professional and theoretical knowledge.	In the course of training, students' logical thinking, comparison, and creative activity evaluation skills are developed.	It can be used in the form of work in small groups in practical, seminar, laboratory classes.
"SCORE" method	Teaches participants to think freely and independently, to analyze problem situations in a correct and logical connection, or to form clear conclusions and attitudes towards the problem.	Develops analytical, cognitive and critical thinking, professional and practical skills, independence.	It can be used in practical training, generalization and control lessons in the form of individual and small group work.

"Step-by-step" technology	teaches independent, logical thinking, research, ability to influence the team, initiative.	Develops logical and creative thinking, constructive skills and memory on a specific topic or concept.	The lecture is used in the form of a seminar, practical training, work in small groups
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EXPERIMENTAL WORKS:

Undoubtedly, it is necessary to develop a system for evaluating the professional competence of managers and pedagogues in order to improve the quality of education and to form a rating of higher education institutions in the international arena, to take into account the existing advanced foreign experiences in this regard, and to ensure the adaptability of these criteria to the rapidly changing conditions of the labor market.

Based on these priority tasks, within the framework of the research, experimental work was carried out on the development of the diagnostic system of the professional competence of managers and pedagogues of higher educational institutions.

The purpose of the experimental work is to develop a diagnostic system of the level of development of the professional competence of managers and pedagogues of higher educational institutions in accordance with the qualification requirements in the field of education.

It is known that the scientific research conducted in the pedagogical direction, relying on its organizational and methodological foundations, is designed in the following theoretical-prognostic analysis stage, design stage, needs study, introduction, analysis of the process and final results, and qualitative stages.

The specificity of these technological stages and their impact on the successful organization of pedagogical experimental work were studied, and the tasks of the activity related to the experimental stage of the research were determined as follows:

- to determine the composition of the main indicators describing the level of professional competence based on the content, quality and qualification requirements for retraining and professional development of pedagogic personnel and classification.
- interpretation of factors influencing the processes of professional competence development of pedagogic personnel.
- determining the indicators of the level of development of professional competence of pedagogues and choosing qualitative mechanisms.
- analysis, summarization of evaluation results and development of conclusions and proposals based on them. The effectiveness of the pedagogical experiment-test work was ensured by the fact that it was carried out on the basis of a special program, the use of regional selective control, the creation of appropriate conditions, and the development of informational and analytical criteria that determine the level of professional competence (Table 3).

In accordance with these criteria, a diagnostic map of the level of development of professional competence of pedagogic personnel of higher education institutions was determined. This diagnostic map reflected the requirements for the level of professional competence of the pedagogue personnel, and it served not only to reflect diagnostic indicators, but also to determine the level of effectiveness of retraining and professional development programs.

Assessment criteria and diagnostic map of professional competence of teaching staff

Criteria	Indicators	Integral diagnostic technologies
Informatove	Knowledge of regulatory and legal documents in the field of management and pedagogical activity, social activity (K-1)	Test, essay, project work, assessment tasks, training
	Independent search, analysis, sorting and orientation of information related to professional management activities (K-2)	Assessment assignments, expert assessment based on analysis of open lessons, synergistic analysis
		Test, creative assignments, expert assessment based on the analysis of open lessons, training
		Communicative methods, authentic analysis
Analytical	Making decisions based on systematic analysis of professional management tasks (K-5)	Situational assignments, interviews, case studies, decision trees
	Development of profile competencies, mastery of management skills (K-6)	Reflexive technologies, trainings, SWOT analysis, presentation of project work, acmeogram
	Personal and professional development, publishing activities (K-7)	Scientific and bibliometric analysis based on electronic portfolio results, acmeogram

Table 3 shows the content of the indicator structure of competencies that allows to determine the level of development of the professional competence of pedagogic personnel of higher education institutions (9).

This diagnostic map used a graded approach to determine the criteria and indicators for evaluating the development of professional competence of teaching staff of higher education institutions. That is, in the evaluation of the professional competence of pedagogical staff, it is adaptive, based on a 100-point scale. productive and creative (creative) levels were defined.

Mathematical statistical methods were used to prove the effectiveness of the obtained results and their correctness in order to determine the reliability of the numerical indicators obtained from the experiment and the validity of the ideas put forward in the scientific research. In order to study the practical situation of the research problem and determine the direction of the necessary measures, experimental work was carried out in four stages. Experimental work was carried out in 2022-2022, and teaching staff of higher education institutions took part in it.

In the course of experimental work, the level of professional competence of leaders and pedagogues was assessed by means of integrated diagnostic technologies.

In order to statistically analyze changes in the level of professional competence of pedagogic personnel of higher education institutions before and after the experiment, tables were created that represent the dynamic growth of the level of professional competence. Based on the results of the qualitative analysis, the professional impact indicators of competence development

were determined. Impact monitoring is a system of studying and evaluating the impact of the results of the development of professional competence on the effectiveness of the activity. In the course of our research, the influence of the level of competence development on the efficiency of professional activity was determined on the basis of impact monitoring.

According to the difference in the growth rate of pedagogical personnel, at the beginning of the experiment, the high level was 1.87%, at the end of the experiment it was 5.87%, i.e. 4%, while the middle level was 7.58%, at the end of the experiment it was 14.84%, i.e. 7, increased by 25%, if the lower level was 23.97%, at the end of the experiment it increased by 31.29%, i.e. 7.32%, if the lower level was 66.58%, then at the end of the experiment it was 47.84%, i.e. 18 It can be seen that it decreased by 74% (Figure 1).

These results were analyzed using statistical methods. According to the above initial and final analysis tables and diagrams, the obtained results were analyzed using Fisher's criterion, one of the methods of mathematical statistics (9,10).

III. SUGGESTIONS AND COMMENTS. In the research work, in the process of studying the problem of developing the professional competence of pedagogic personnel of a higher educational institution, the concepts of "professional competence" and "professional competence development" were analyzed and defined from the point of view of the author's interpretation. Professional competence of the head and pedagogic personnel of the higher educational institution - to have the knowledge, skills and qualifications necessary for effective activity in the field of education, management and research, as well as personal and social qualities, to be able to make the right decision independently in specific and non-standard situations, is the level of readiness associated with management and feeling responsible for each action.

The development of the professional competence of teachers was considered as an integrated process based on the acquisition of modern approaches, innovative technologies, new knowledge, skills and competencies related to the field, aimed at increasing the level and quality of professional skills based on individual needs and qualification requirements.

Based on scientific-pedagogical analysis, it became known that the professional competence of leaders and pedagogues was classified according to the following directions (Table 4).

Also, during the research, it was determined that there are the following approaches to the formation of the content and architecture of the development of professional competence: block-level approach, that is, the typology of the content of professional competence in the form of basic, general-professional, subject-specific subject competencies that are mastered within the subject blocks of the curriculum and represent the content of the main directions of activity; functional approach design of professional tasks within the field of activity and position based on the system of expressed competencies; an individual-psychological approach aimed at the development of competencies that serve the specialist's quick and conflict-free adaptation to specific working conditions.

Acquaintance with the content of theoretical and practical sources showed that the problem of professional competence and competence development has been studied in various directions in the scientific research of many researchers. In most pedagogical-psychological literature, professional competence is defined as the manifestation of professional training in practical activity, which is formed on the basis of the socio-professional orientation of a person and serves to ensure the effective solution of professional tasks (11).

Typology of professional competence

Type of competence	Content
Professional competence	Special competence arising from the requirements of the field of professional activity (good knowledge of one's work); technological competence; subjective competence; professional competence (having knowledge about the world of professions); legal competence; economic competence and others.
Competence in professional communication	Communicative and communicative competence related to the effective organization of pedagogical activities (the ability to cooperate); social-perceptual competence (ability to perceive other people); differential psychological competence; diagnostic competence (ability to study others); moral competence; empathic competence; intercultural, socio-cultural, gender competence (tolerance towards other cultures); competence in conflict situations, etc
Profile (special) competence	Psychological competence of organizing practical activities from the point of view of field of activity, specialty and specialization (the ability to learn other people); individual, autopsychological competence (self-learning skills); cultural competence (accepting cultural norms accepted in society and mastering them as a standard for oneself); reflexive competence, etc.).

At the same time, professional competence is also noted as the suitability of the level of professional training of a specialist to the requirements of activity and competence. This is expressed through the requirements of the labor market for modern specialists, the complex of integrative professional and personal qualities, and the content of professional activity focused on competencies.

In the process of scientific-pedagogical analysis, the problems of formation and development of professional competence are studied in the example of training of future specialists in most researches, at the same time, the structure and elements of competencies put forward in these studies are aimed at the requirements of future professional activity, and the issues of developing the professional competence of practicing specialists are based on the real requirements of the activity. It was determined that it requires planning. Taking into account these aspects, we focused the research direction on researching the content and mechanisms of the development of the professional competence of managers and pedagogues at the post-higher education level, with a focus on the development strategies of the higher education institution and corporate goals.

Conclusion. The analysis of the theoretical-methodological foundations of the development of professional competence of teaching staff of higher educational institutions showed that the internationalization and globalization trends in today's education system showed the need to improve the quality of professional education based on modern approaches. The development of professional competence, in turn, involves the systematization of andragogic, acmeological and metacognitive factors that guarantee the effectiveness of this process, as well as the interaction of acmeological criteria of professional development (professional motivation, personal-professional qualities, self-management, reflexivity, creativity) with the system of

professional development and the environment of professional activity. the following results were achieved on the basis of provision:

- ensuring systematicity in the development of professional competence of pedagogues, stratification of educational programs based on the level of professional competence on the basis of mastering modern educational technologies and innovative approaches, organizational-management mechanisms of implementing alternative forms and the impact monitoring system were scientifically and theoretically based on the requirements of andragogic education. Impact monitoring is a study of the impact of the results of the development of professional competence on the effectiveness of the activity, and its implementation is considered to be a system, and its implementation serves to increase the effectiveness of the correctional and management processes based on the quality analysis of the professional activity.

- on the basis of the results of research, the professional competence of pedagogues was improved based on the introduction of variable information-methodical support based on innovative and interactive technologies such as case method, project education, master classes, reflexive training, binary training, portfolio, creative assignments. In the process of experimental work, the implementation of the above-mentioned innovative methodical support was confirmed to be an effective didactic mechanism for the development of the professional competence of leaders and pedagogues.

- the organizational, pedagogical and technological mechanisms of introducing the blended learning model based on the combination of traditional and electronic learning opportunities into the processes of qualification improvement were determined. Its comprehensive set of resources: interactive-electronic communication based on online (LMS) and offline modes, consultative-tutoring service, information-methodical support consisting of online controls and self-assessment (self-assessment) will be developed based on the time-content-result unit. Didactic requirements have been improved.

- the qualitative mechanisms of professional competence of pedagogues were improved based on the development of a set of integrated diagnostic technologies (portfolio, tests, "assessment center", essay, case, acmeogram, etc.) -tested.

- as a result of researches, to ensure that training courses are organized in accordance with approved qualification requirements, curricula and programs; conducting a systematic analysis of the normative-legal and didactic support of the educational process (qualification requirements, curriculum and programs, tasks aimed at evaluating the knowledge, skills and qualifications of students, graduation works, attestation results); mechanisms for improving the system of quality control of education aimed at systematic monitoring of the results of educational activities were proposed.

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