

DIAGNOSTICS OF LEVEL OF DEVELOPMENT OF PROFESSIONAL COMPETENCE OF PEDAGOGICAL PERSONNEL IN THE SYSTEM OF TRAINING

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Abstract. *The article develops a system for assessing the professional competence of teachers in improving the quality of education and the formation of international rankings of higher education institutions, taking into account the best international practices in this field, and ensuring that these criteria are adaptable to the rapidly changing labor market. Within the framework of the research, the professional competence of the pedagogical personnel of higher educational institutions is defined Simon experimental work done on the development of the thought. The purpose of the pilot work is to develop a system of diagnostics of professional competence of managers and teachers of higher education institutions in accordance with the qualification requirements in the field of education*

Keywords: *leader, educator, competence, piloting, education, rating, indicator, model, online survey, online test, gender equality, psychological stability.*

I. INTRODUCTION

Decree of the President of the Republic of Uzbekistan dated June 6, 2018 No PP-3775 "On additional measures to improve the quality of education in the higher educational institutions and their active participation in large-scale reforms in the country" formation of a modern system of skills assessment [Report this website, 07/18/3775/1313-San]. In this regard, the educational system of the State Inspection for Education Quality under the Cabinet of Ministers of the Republic of Uzbekistan defines the competence of the professional competence of the teaching staff in the implementation of state policy on educational process, teaching staff, quality control and training. a systematic review task was identified as one of the priorities. Undoubtedly, it is necessary to develop a system for assessing the professional competence of managers and teachers in improving the quality of education and the formation of international rankings of higher education institutions, taking into account the best international practices in this field, and adapting these criteria to rapidly changing labor market conditions. Based on these priorities, within the framework of the research, pilot tests were conducted to develop a diagnostic system for the professional competence of managers and teachers of higher education institutions.

The purpose of the pilot work is to develop a diagnostic system for the development of professional competence of managers and teachers of higher education institutions in accordance with the qualification requirements in the field of education. During the experiment, a series of positive (internal, external) and negative (negative) factors influencing the level of development of professional competence of supervisor and pedagogical staff was identified and characterized as follows.

II. MATERIALS AND METHODS:

Positive factors:

- *External factors*: HEI, team environment, image of the institution, facilitation of results of independent professional development, transparent and fair system of professional and managerial professional evaluation of human resources, humanitarian, institutional support, gender equality, psychological stability in relationships;

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- *Internal factors* - personal orientation, professional reflection, professional self-assessment, metacognitive skills, trajectory of individual-professional development, self-education.

Negative factors:

- *Social status of the profession*, low wages, poor image of the institution, gender inequality, difficulties in professional activities, barriers to institutional support, inadequate conditions for professional development and growth, poor environment, valeological and andragogic factors;

- *Particular attention* was paid to the impact of these factors in the success of the pilot studies. The effectiveness of the pedagogical experiment was based on a special program, the use of regional sampling control, the creation of appropriate conditions, and the development of informational and analytical criteria to determine the level of professional competence (Table 1).

Table 1.

Diagnostic Map and Criteria for Evaluation of the Competence of Leaders and Teachers of Higher Education Institutions

Criteria	Indicators	Integrated diagnostic technologies
Informative	Knowledge of regulatory and legal documents in the field of management and pedagogical activity, social activity (K-1)	Exams, essays, project work, assessment tasks, trainings
	Independent Search, Analysis, Sorting and Directional Information on Professional and Administrative Activity (K-2)	Assessment assignments, expert assessments based on open lesson analysis, synergistic analysis Assessment assignments, expert assessments based on open lesson analysis, synergistic analysis Expert assessments based on exams, creative tasks, open lesson analysis, trainings
	Use of AK and Software for Managing and Managing Professionals (K-3)	Expert assessments based on exams, creative tasks, open lesson analysis, trainings
	Advanced Foreign Language Skills (K-4)	Communication techniques, authentic analysis

Analytical	Decision-making based on a systematic review of professional management tasks (K-5)	Situation tasks, interviews, case analysis, decision-making genealogy
	Advanced competence profile, managerial skills (K-6)	Reflective technologies, trainings, SWOT analysis, project presentation, acmeogram
	Personal and professional development, publishing activity (K-7)	Naukometric and bibliometric analysis based on the results of the electronic portfolio, acmeogram

According to these criteria a diagnostic map of the level of development of professional competence of the leading and pedagogical personnel of higher educational institutions is defined. This diagnostic map reflects the requirements for the level of professional competence of supervisors and educators, which has helped not only to refine diagnostic indicators but also to determine the effectiveness of retraining and refresher programs. Table 1 shows the structure of the competence indicators, which determine the level of professional competence of managers and teachers in higher education institutions.

Based on this model, a qualitative approach was used to determine the criteria and criteria for assessing the development of professional competence of managers and teachers in higher education institutions. That is, adaptive, supportive of a 100-point scale when assessing the professional competence of supervisors and teachers. Production and creative (creative) levels were determined (Table 2) [Kudryavtseva E.I. 2012-340 p.].

Table 2.

Classification of integrated level of professional competence of managers and teachers of higher educational institutions

Points	Level indicators	Level spread
0-55 points	Bottom the degree	It is characterized by underdevelopment of the knowledge, skills and abilities necessary for effective professional activity in managerial and pedagogical staff. In this category, the functional and technological component of professional competence in the management and pedagogical staff is not at the required level, it does not set the trajectory of self-professional development, and the professional qualities are satisfactory.
56-70 points	Support the degree	At this level, the leading professional and pedagogical staff is well-developed professional competence, the most active-technological component of professional activity is developed. They have some theoretical understanding of the trajectory of self-development. Although they have professional knowledge and skills, however, they lack sufficient organizational and managerial skills to deal with unusual situations in their professional activities. Leaders and educators need to acquire professional knowledge, skills and abilities in the field of innovative activities, but

		this need not be systematic, practical and poorly developed.
71-85 points	Production level	The degree of personal orientation, professional self-awareness, and professional qualities corresponds to the requirements of the activity. They have the necessary knowledge, skills and abilities in the social, legal, pedagogical and psychological, special - methodical directions that form the basis of the potential training for professional activity. In particular, they have the skills to design, organize effective educational and managerial activities and make tactical decisions. There is also a need for this type of leadership and pedagogical staff to develop self-directed professional development, moderation, research and professional innovation, but they lack experience in organizing practical activities.
86-100 points	Creative-creative level	Personal and reflexive competence is developed along with the necessary professional competences in the supervisor and pedagogical staff. They have a strong professional position and image, with an independent professional development program, creative research, project management, optimal decision making in non-standard situations, with a high level of innovative activity and creativity. They achieved the axiological, acmeological level of innovative activity.

In the process of diagnostics of professional competence of teachers of higher educational institutions, special attention was paid to the following aspects [Ismailova Z. Et al.2019.1175 p.].

1. In assessing the professional competence of supervisors and teachers, analytical conclusions were drawn, not only on the basis of evaluation criteria, but also on the analysis of previous diagnostic results.

2. Defining the level of development of professional competence in the process of diagnostics, the opportunities and trajectories of individual and professional development of supervisor and pedagogical staff in this area were identified.

3. The study of the level of development of the professional competence of supervisors and educators promoted their self-evaluation, formation of personal-reflexive approach, motivation of professional self-development..

4. Based on the assessment of the professional competence of supervisor and pedagogical staff justified the need to develop their own strategy based on the corporate goals of each HEI to implement integral mechanisms of its development and implementation of integrated monitoring [Mirsolieva M. 2019. - 120 p.].

III. RESULTS AND DISCUSSION:

The experimental-test work carried out within the framework of the study was carried out on the basis of a diagnostic map. As respondents to the process of conducting experimental and test works, the network Center for professional development and retraining under the Institute attracted a total of 100 listeners (specialized science teachers of the students)[Ismailova Z. K. and

others. 2015 .—p.p. 218-220].

The experiment was conducted during the period of testing (2015-2018 years). Taking into account the peculiarities of the organization of the educational process in the institutions of retraining and improvement of qualifications, the order of control and evaluation of the quality of education, as well as the unique information and methodological provision and pedagogical conditions, the results were compared in terms of the introduction of innovations related to the improvement of professional competence in the.

In order to investigate the practical state of the research problem and determine the direction of the necessary measures, the experimental and testing work was carried out in four stages and its diagnostic map was developed. Experimental and testing works were carried out in 2015-2018 and 100 personnel of higher education institutions took part in it. The significant aspect of the learning processes was re-analyzed after 3-year interval of activity of pedagogical personnel who passed the retraining and professional development courses in 2015. The level of professional competence of managers and pedagogical personnel in the process of experimental and test works was assessed by means of integrated diagnostic technologies.

Based on the results of the kvalimetric analysis, the impact indicators of Professional Competence Development were determined. Impact monitoring is a system of study, evaluation of the impact of the results of professional competence development on the effectiveness of activities. In the process of our research, the impact of the level of development of compartments on the efficiency of professional activity was determined on the basis of the indicative structure. In order to analyze the professional competence of the managers and pedagogical personnel of higher educational institutions before the level of development of experience-tested and post-test statistical changes, tables are formed that represent the dynamic increase in the level of professional competence.

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IV. CONCLUSION:

The effectiveness of innovations included in the system of retraining and professional development of pedagogical personnel of higher educational institutions in the following directions was studied during the experimental and test works:

One of them. On the basis of the ideas of the dissertation, the training plan included modules "professional competence and creativity of pedagogue", "modernization of educational-methodical process in higher educational institutions and application of innovative educational technologies", "professional competence and creativity of education manager", and the content oriented to the competences was developed and introduced.

Particular attention was paid to the formation of the following knowledge, skills and competences within the framework of the proposed module "modernization of educational and methodological process in higher educational institutions and application of innovative educational technologies" for pedagogical personnel:

- issues of modernization of educational process and educational-methodical activity and its main directions; the essence of innovative educational technologies; ways of applying innovative educational technologies, modular educational technologies to the educational process; knowledge of modern requirements for the development of innovation competence of personnel;

- to develop pedagogical kvalimetry criteria, apply them to practice, organize control and monitoring of innovation processes in higher educational institutions, have the skills to set standards in the field of development;

- acquisition of skills of management and development of innovative processes aimed at ensuring the quality of education in higher educational institutions;

- systematic analysis of innovative processes in education and coordination of implementation of modern approaches to ensure the quality of Education;

- organization and management of independent activities of professors and teachers and students on the basis of a competitive approach;

- development of effective ways of introducing innovative educational technologies into educational and methodical activities;

-to ensure that communication and self-personal and professional developmenttirib go have competences.

Presentation, work in small groups, training, debates, keys-stadi, Assembly, blis-game, concert map, Roll Games, SWOT-analysis and other innovative educational technologies were used in the trainings with the help of modern information and communication technologies. At the same time:

- problematic situations when working with a team, obstacles and their solving techniques, management of conjugates;

- culture and image of the teacher;

- teacher's creativity in management decision making.

The sessions were organized in problematic and input lectures, keys analysis, training, conversation-discussion, evristical conversation and other forms using audiovisual tools.

Two. In the process of retraining the personnel of the higher education system and improving their skills, information and methodological provision based on innovative-interactive technologies developed on the results of research and modern pedagogical, multimedia and information and communication technologies have been widely introduced. Innovative education, master classes on the basis of pedagogical and information and communication technologies, seminar-training on improvement of innovative activities of teachers, programs of short-term training courses aimed at creative thinking for pedagogical personnel who will teach in retraining and qualification courses have been developed.

Three. The procedure for the organization and conduct of retraining and qualification courses through distance learning methods has been developed and introduced into practice(attached), as well as online tutoring services for distance course listeners have been obtained.

Four. The "Assessment system", which serves to assess the level of mastering of the audience, as well as the dynamics of development of professional competences, has been developed and introduced into practice.

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Also, retraining and qualification courses are defined as one of the tasks of the experimental and test work to determine the effectiveness of the indicators based on the innovations included in the educational process, as well as the application of the above rules to the retraining and qualification improvement processes, and the activities of the senior personnel passed the courses in 2015

Experiment-the mathematical statistical methods were used to prove the effectiveness of the results obtained and its completeness in order to determine the reliability of the numerical indicators tested and the validity of the ideas put forward in the scientific research.

In order to determine the effectiveness of experimental and testing work, tables are created on the basis of data analysis in the electronic monitoring system of the network Center for professional development and retraining under the Institute, which represent a dynamic increase in the level of professional competence of pedagogical persone [Ismailova Z. K., et. al.2015 .p.p. 216-218].

The results of the training in the courses of retraining and professional development of respondents to the Bunda are analyzed on the basis of the indicators of competences. In order to determine the effectiveness of the results obtained in the experiment and its validity, it is calculated by placing the statistical value in the degree of freedom of the Criterion Student, using mathematical statistical formulas.

From the results obtained, it can be seen that the results in the word experiment were confirmed by statistical methods that they were effective against the results in the beginning of the experiment. The efficiency in the experimental group proved to be 1.24 per cent higher, meaning 24 per cent higher.

REFERENCES

1. Mirziyoyev Sh. Location Achievements of Science - an important factor of development // " people's question " newspaper, December 31, 2016.
2. Decree of the president of the Republic of Uzbekistan on measures to ensure more effective organization of the process of acquisition of rights over land parcels and other immovable property as part of the South Caucasus pipeline expansion project more ... , 07/18/3775/1313-San.3. Lebedev O.E Competence approach in education // School technologies. - 2004. - No. 5. - pp. 3-1.
3. Ismailova Z. et al. The role of modern women in society and family. Opción, Año 35, Especial No.21 (2019): - p.p.734-751.
4. Ismailova Z. K. and others. The role of the rules of design and planning of teaching technology at lectures in the preparation of future professional teachers // Pedagogy: traditions and innovations. - 2015 .—p.p. 218-220.
5. Ismailova Z. K., Himmataliev D. O., Baybaeva M. Kh. The main issues of integration of education and production and ways to solve them // Pedagogy: traditions and innovations. - 2015 .—p.p. 216-218.
6. Ismailova Z. K., Baybaeva M. Kh., Mukimov B. R. General patterns and principles of education // Young Scientist. - 2015. - No. 8. – p.p 934-937.
7. Ismailova Z. Et al. The use of innovation technologies in the formation of students' professional competences. International joburnal of ingenering and advanced technology (tm) Volume-9 Issue-1. October.2019.1175 p.

8. Mirsolieva M.The T., Sultanov A.Sh., Husniddinova G.The G. Andragogic basis of qualification development processes/ management and development of personnel resources in higher education system of Uzbekistan. Materials of the Republican seminar. - Tashkent, 2014. - 76-79 p.
9. Mirsolieva M.The T. Improvement of professional competence of managers and pedagogical personnel of higher educational institutions. Monographs. - Tashkent, "Science and technology", 2019. - 120 B. - 120 p.
10. Kudryavtseva E.I. Kompetentsiya I Management: kompetentsii V menedjmente, kompetentsii menedjerov, menedjment kompetentsii. Monographs. St. Petersburg.: 2012-340 s. Rejct A. Pedagogy. - What?: Izdatelstva "Centr", 2005. - 237 P.
11. Kurbanov Sh.The e., Seytxalilov E.The A. Upravlenie kachestvom obrazovaniya. - What?: East, 2004. – 552p.