Implementation of the competence-based approach into the system of training future teachers in higher educational institutions of Kazakhstan

Natalya Mirza, Rauana Mazhenova, Gulnaz Tleuzhanova, Nurmambek Ramashov, Gulden Akbayeva

Karaganda State University named after E.A. Buketov, 100019, Kazakhstan d61975@rambler.ru

Abstract: The leading purpose of higher education in Kazakhstan is the formation of a coherent structure of professional activity. Theoretical, practical and creative components of readiness of a teacher to implementation of professional activity are studied in the article. The analysis of scientific literature, carried out by us, has allowed us to formulate a generalized image of the most significant elements of the competence-based approach in the domestic pedagogy. The purpose of the competence-based approach is ensuring the quality of education. Such phenomena as "competency" and "competence" are viewed as main units of updating the content of education. Data obtained during the study make a definite contribution to the study of the modern teacher professional competency; which allows carrying out its more differentiated development and scientific understanding in conjunction with professional training in higher educational institutions and in the process of post-graduate education.

[Mirza N., Mazhenova R., Tleuzhanova G., Ramashov N., Akbayeva G. Implementation of the competence-based approach into the system of training future teachers in higher educational institutions of Kazakhstan. *Life Sci* J 2014;11(9):599-605]. (ISSN:1097-8135). http://www.lifesciencesite.com. 96

Keywords: Competence, professional competency, communicative competency, pedagogical technologies, pedagogical system, pedagogical culture.

1. Introduction

Kazakhstani High School is undergoing major changes. They are born of the current social situation, which allows seeing a new the meaning and value of education as the most important resource of social development. Authority and achievements of Kazakhstani High School, recognized by world community, however, do not prevent reflection of collisions and issues facing it at this stage. Among them – Kazakhstan's entry into the world educational space, matching of quality criteria to world standards, competitiveness of graduates in the labor market, the role of university complexes in the development of high-tech industries and educational systems, etc.

The new situation in the development of Kazakhstani higher education has arisen in connection with the entry of Kazakhstan into the Bologna process. It is this that increased interest in the competence-based approach as one of the strategies of professional education. With this approach, as shown by the analysis of social expectations, increase in the quality of domestic system of higher professional education, its compliance with the requirements of the post-industrial society, implying competency of graduates and their academic and social mobility, commitment to continuing education, orientation to the labor market requirements are associated.

As the President of the Republic of Kazakhstan Nursultan Nazarbayev stated, a vulnerable point in reforming the entire education system is an issue of the quality of education and training of specialists (Nazarbayev, 1998). Currently, the requirements to the level of professionalism of a teacher, the role of their personal responsibility for the performance of their work are raised. Under these conditions, the problem of improving pedagogical skills, development of creative potential of a teacher is not only as an objective social need, but a subjective need of a teacher to increase professional competency and mastery, too.

The education system of the Republic of Kazakhstan is focused on entry into the world educational space, so the quality of education is considered here in the context of compliance of the level of the received educational services with international standards and norms. The main focus is made on update of the software content of training and education, person-centered interaction of teachers with students, development and enhancement of individual students' personalities.

One of the main tasks of high school, along with the formation of harmoniously developed personality, is the problem of formation of a professionally competent specialist capable of free and active thinking, modelling the educational and training process, self-generating and implementing new ideas and technologies of training and education, and thus achieving better results in their professional activities and implementation of their own professional opportunities.

Changes in the higher education system are going to alter conditions of development of a future specialist, too: there is a need to prepare not only

spiritually developed and professionally trained specialists, but also specialists that sensitively capture the latest achievements in science and technology. This requires flexibility of thinking, its advanced character, high professionalism, competency, an ability to communicate with partners, innovative approaches to solving arising problems.

The focus of attention of educational institutions currently is issues of creative mastery of a profession, struggle for the quality of knowledge, increase in students' activity. A view on the young and on their requests, the reform of comprehensive and vocational schools, higher education is redefined. In this regard, various problems of training and education, as well as the development of education need further study. A specialist today is an intellectual armed with high-quality skills and abilities on a particular specialty, a creative personality, which is constantly developing and improving their knowledge and skills. A knowledgeable, able person can always use their opportunities in life situations.

Thus, the phenomenon of professional competency of a future teacher today is a multifaceted, complex phenomenon, which is characterized by properties of self-development and renewal in accordance with modernization trends of the educational system and the developing society that makes its study relevant, as well as the development of its theoretical and methodological foundations in modern conditions is the problem of our research.

2. Material and Methods

Methodological and theoretical foundations of this study are based on: theoretical analysis of philosophical and pedagogical concepts on issues of general professional education; shaping personality of a young man as a professional on the fundamental concept of the theory of knowledge, dialectic of the historical development of the system of education and personality in the process of society formation; theory of the development of the principle of "life-long education for everyone"; teaching on activities and creative essence of a personality; methodological position of the unity of consciousness and activity, the theory of the object of professional activities, as well as system-structural integrity, personality and activity, cultural, and axiological, competence-based, synergetic approaches.

For solving the set problems and verifying the initial data and assumptions a set of techniques and research methods, adequate to the nature of the phenomenon under study is used: methodological and theoretical analysis of the philosophical, sociological, psychological, pedagogical and methodological

domestic and foreign literature allowing to identify trends of formation of the education system, systematic approach to modeling future teacher training; synthesis of empirical data; study and generalization of mass teaching experience, study of activities of students, teachers and administrators of higher education institutions, observation, expert evaluation, self-assessment, conversations, questionnaires, interviews, diagnosis of the state and development of knowledge, skills and professionally important qualities, ascertaining and forming experiment, methods of mathematical statistics.

3. Results

Our study has shown that professional competency is a necessary component of a modern teacher professionalism and the most important determinant of the pedagogical process of training future teachers in terms of higher education.

The results of our scientific and practical studies have confirmed the accuracy of the supposed hypothesis that efficient formation of professional competency of future teachers is provided if: the basis of the pedagogical process of its implementation in higher educational institutions is scientific and theoretical and scientific and methodological principles formulated in the context of the current status and future development of the problem of formation of professional competency of a specialist. During implementation of this process adequate transformation of learning activities of a student- future teacher into professional activity (correlation of theoretical knowledge and practical skills) is carried out. The process of training future teachers in pedagogical high school is carried out using modern communication, personal developmental and other innovative technologies formation of professional competence. In higher educational institutions and the postgraduate education system effective psycho-pedagogical conditions of forming an environment of teacher professional competency, including development and implementation of indicators of the formation of professional competency, accounting the bases of professional interaction and characteristic peculiarities of a particular institution are established. The process of professional competency formation in higher educational institutions is a clearly developed. promising directed on self-development organizing educational system, forming the basis of professional competence-based culture of a future teacher.

In recent years, there is an increasing number of scientific and theoretical and scientific and methodical works, which comprehensively analyze the concepts of "competency", "competence", as well as the content and nature of the competence-based

approach, in modern science and practice of (Baydenko, 2004).

A wide range of contemporary approaches to the professionalism of teachers makes it necessary to clarify the essence of the professional competency of teachers in general and the teachers, in particular, through a collection of dedicated private types of professional competency. In this regard, the professional competency of a future teacher is defined by us as an integrative tier personal formation, suggesting motivation for personal and professional growth of a teacher and including a high and level of theoretical methodological, psychological and pedagogical, methodological and practical training, means of solving pedagogical tasks and criteria for becoming a teacher-professional and having the ultimate goal of forming a professional teacher competence-based culture with its selfdevelopment skills. Besides, the dynamics of the development of professional competency of future teachers is determined by the change of reproductive performance of activities and operations with the help of creativity, harmonization and complexity of the components of its competency.

The content of the special competency includes:

- awareness and understanding of the role of the chosen profession, knowledge of boundaries of their professional activities, responsibility for the results of their labor;
- knowledge of their duties, complying with professional ethics;
- high level of the professional training: theoretical and practical;
- professional knowledge (in-depth knowledge of all sections of psychology and pedagogy), professional skills and abilities;
- application of knowledge and skills in practice, experience in solving psychological and pedagogical problems, acquired in practice;
- knowledge of characteristics of the professional activity, possession of tools, methods and technology of the professional activity;
- commitment to professional development and self-education;
- professionally important qualities of a teacher, special abilities;
- professional "I-Concept" of a teacher a system of ideas of a teacher reporting on how he sees and evaluates himself currently "Actual Self", how he sees and estimates himself with respect to the initial stages of work "Retrospective Self", what he wanted to be "Ideal Self", as he appears to other people teachers, pupils, parents, etc. "Reflexive Self";

- professional thinking thinking, aimed at solving professional challenges in specific activities of a teacher;
- professional reflection evaluation of their professional abilities, actions, their correlation with the objectives and the results of their activities;
 - erudition and general culture;
- professional orientation and professional motivation.

Communicative competency of a teacher is a collection of communicative skills, abilities and qualities that determine readiness for professional communication and its effectiveness. The content of the communicative competency includes:

- orientation of results of the professional activity of a teacher for the benefit of others;
- ability to build and maintain relationships with other people, the ability to work in a team and solve problems together;
- construction of a general strategy of human interaction;
- skills aimed at perception and understanding of people by each other;
 - possession of the professional language;
- allocation of the information and content aspects in communication;
 - use of a variety of communication means;
- ability to manage their condition and behavior;
- ability to listen and understand an interlocutor;
 - personal communication skills.

The individual and personal competency of a teacher is a collection of individual and personality characteristics that allow them to effectively realize their potential opportunities.

The content of the individual personal competency includes:

- flexible adaptation of themselves to the profession, of a profession to themselves, adoption of themselves as professionals;
- positive "I-Concept" the system of ideas of a person about oneself, on which he builds his interaction with other people and refers to himself;
- ability to self realization identification of their individual, personal and professional opportunities;
- ability to self-regulation a system of conscious actions aimed at maintaining and achieving the required mental state, management of their psyche;
- ability to personal self-expression, self-development, self-improvement, pursuit for personal growth;
 - personal qualities;
 - development of the individual style of the

activity;

- developed motivation.

The development of the professional competency of a future teacher begins in his student days and lasts for many years.

Modernization of approaches to the formation of the professional competency of future teachers is now inspired appearing of a wide range of copyright innovative technologies in this field, among which an important place belongs to the personality-developmental and communication technologies. The mandatory element of modern technologies of formation of the professional competency of future teachers is their professionallyoriented character. Another unifying factor of modern technologies of such a kind is their integrative character with which we associate further prospects for development of modern technologies of formation of the professional competency of future teachers. No less important elements of modern technologies of formation of the professional competency of future teachers in the context of their integration is also the presence of elements of personality-developing and communication nature (Serikov, 2008).

Under the student-developing technology we mean a system of psycho-pedagogical procedures of interaction between teachers and students based on taking into account of their abilities, aptitudes, aimed at implementation of the content, methods, and forms of adequate education objectives, future activities and professionally important qualities of specialists.

There are following personal functions in the basis of the diversity of personality-developing technologies of formation of the professional competency of future teachers:

- motivation (acceptance and justification of activities);
- mediation (in relation to external influences and internal momenta of conduct);
- collision (vision of hidden contradictions of reality);
- critics (in respect of the proposed external values and norms);
- reflection (construction and retaining of a certain way I-image);
- meaning-coinage (definition of the system of life meanings up to the most important the essence of life);
- orientation (creating personal picture of the world individual outlook);
- ensuring autonomy and sustainability of the inner world, creatively transforming (providing creative nature of any personally meaningful activities):
- self-realization (strive for recognition of their image of "I" by surrounding people);

- providing a level of spirituality of life activities according to personal demands (prevention of consolidation of life activities to utilitarian purposes) (Zimnaya, 2004).

Completeness of these functions, representativeness in the activities of subjects of the educational process may indicate that the educational process has reached a personal level of its operation, as shown in figure 1.

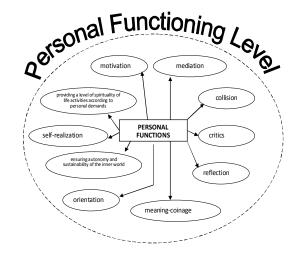


Figure 1. Personal functions lying in the basis of the diversity of personality-developing technologies of formation of the professional competency of future teachers

Communication technologies, which integrate a variety of different methods and techniques of training pedagogical communication, communicative activities, self-development and translation of the given skills, joint use of which contributes to the best psychological and teaching final outcomes.

A set of psycho-pedagogical conditions of formation of the environment of professional competency of future teachers in higher and postgraduate education system includes criterion-tier, communication and adaptation components.

1) Under criteria of the level of formation of professional competency of future teachers, we mean a set of indicators that make it possible to assess how a future teacher is prepared to conscious fulfillment of their professional duties and manifestation of professional competency in dealing with both learning and teaching, and professional and educational challenges in conditions of the practical activity. In this case we have identified the following key parameters of professional competency of future teachers which are to be evaluated: motivational and valuable; cognitive and activity; emotional and procedure; reflective, as well as three levels of

formation of professional competency of future teachers: low (reproductive), medium (reproductive creative) and high (creative and individual) level of development. On the medium and high level of formation of professional competency we can talk about formation of a professional and competence-based cultureof future teachers - integral, structural and level formation of a personality, representing itself as the unity of world outlook and methodological, technological and research and creative modules, which determines an average and high degree of mastery of professional and pedagogical competency by a future teacher, has the properties of dynamism and requires further forming and self-development (Innovation, 2014).

2) The communication component of the environment of professional competency of future teachers is determined by aspects of professional interaction, which is a special form of communication between the participants in the educational process, consisting of a coherent body of content and constituents of these component spheres, such as a communicative activity, pedagogical communication, the scope of joint activities, the scope of the partnership, shown in figure 2.

increasing The complexity of communication activities makes it necessary to clarify in modern conditions the concept of "communicative competency of future teachers," which, in our opinion, should be considered not only as a result of the development of professional skills (a skill to establish psychological contact with the audience, to manage the communication process, speech and reflexive skills) and personal qualities (kindness, tact, objectiveness, care, tolerance, selfdiscipline, initiative, etc.) of future teachers, promoting creative solution of pedagogical tasks arising in the communication process, but also as an integrative multifunctional, multi-tiered system in which a future teacher becomes the subject of establishing integrated connections, the subject of learning, teaching and interpersonal interactions, thereby gaining the experience of communicative activity (Mirza and Mazhenova, 2014).

3) An adaptive component of the environment of the formation of professional competency of future teachers is determined by peculiarities of a higher educational institution and the postgraduate education system. In this context, we have determined that today's particularities of the higher educational institution, including higher education institutions of the Republic of Kazakhstan, have ample opportunities to create an environment of effective formation of professional competency of future teachers.

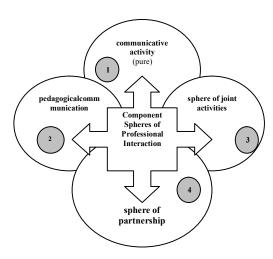


Figure 2. Structure of professional interaction of a future teacher

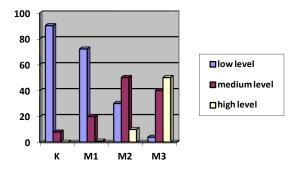
The scientific and theoretical basis for the formation of professional competency of future teachers, formulated by us, has found its reflection in the developed practical pedagogical system that allows to implement the effective process of formation of professional competency of teachers in the following specialties: "Pre-school Education and Training", "Pedagogy and Methodology of Primary Education", "Pedagogy and Psychology " with taking into account contemporary realities (Mirza and Umpirovich, 2014).

The basis of the effective implementation of the given educational system a formulated by us *mechanism* consisting of four successive stages: the first stage is for carrying out constructive composition of a goal and intention, the content development and defining means and conditions for effective implementation of the system, the second-practical implementation of the system is carried out, the third - evaluation of the achieved progress (effectiveness of the system implementation), the fourth - makes necessary changes in the system in accordance with results of the evaluation of its effectiveness, the fifth stage is the launch of the upgraded system.

Effectiveness of the developed pedagogical system of formation of professional competency of future teachers has been identified in the course of conducted experimental research in terms of a higher educational institution.

Analysis of results of the approbation of the pedagogical system developed by us has allowed to achieve an expected result of its implementation, which was seen as achieving of a high (creative or pragmatic) level of professional competency, the

development of foundations of professional and competence-based culture and motivation to further professional self-development in post-graduate period by an overwhelming number of students (Mirza, 2013). Comparison of the results of ascertaining phase of the experiment and its formative stage has enabled the trainees to ascertain the presence of translational stable positive dynamics of levels of formation of professional competency shown in Diagram 1.



K – results of the ascertaining experiment;

 M_1 – results 1 of the experimental stage

M₂ – results 2 of the experimental stage

M₃ – results 3 of the experimental stage (final)

Diagram 1. Dynamics of formation levels of professional competency of future teachers in the framework of realization of the author's educational system

The conducted experimental research has allowed us to identify a number of problems of organizational and pedagogical and psychological character in the sphere of formation of professional competency of future teachers and formulate a set of recommendations on their regulation.

4. Discussions

The theoretical significance of our study is to develop problems of the holistic approach to creating a multi-level system of formation of professional competency of future teachers, taking into account the professional designation of a specialist, based on the integration of pedagogical and information technologies that allow designing the educational process anew and thereby increasing its efficiency (Mirza and Mazhenova, 2013). The practical significance of the study is an ability to use the research results for optimizing the educational and professional activity of students in higher educational institutions in the direction of increasing the efficiency of formation of their professional

competency; for developing and implementing specific techniques, technologies and pedagogical systems of formation of professional competency of future teachers, adapted to the specific conditions of individual educational institutions; forming an effective psycho-pedagogical environment and organizational conditions of the formation of professional competency in a high educational institution and the post-graduate education system.

In the course of the study conducted by us: the definition of professional competency of future teachers in the context of their professional training in a higher educational institution has been specified; theoretical analysis of the essential structural and content characteristics of professional competency of future teachers has been carried out; psychological and pedagogical conditions for their effective implementation have been substantiated; terminological apparatus accompanying theoretical and practical aspects of the formation of professional competency of future teachers has been updated; theoretical and methodological basis for organization of the process of formation of professional competency of future teachers in higher educational institutions has been developed: new theoretical generalizations in the sphere of disclosing the nature of interconnection of the aspects of professional interaction and features of an educational institution as integral components of the environment of formation of professional competency of teachers have been formulated: possibilities of using communication and personalitydeveloping technologies for increasing professional competency of future teachers have been shown; basic criteria and indicators of the level of formation of professional competency of future specialists have been systematized (Mirza and Umpirovich, 2014).

We believe that the promising direction for further scientific research is study of problems of professional and competence-based development of a teacher in the period of his post-graduate professional development, deeper scientific and practical study on issues of the formation and development of the professional culture of a future teacher.

Corresponding Author:

Prof. Dr. Natalya Mirza
Department of Pedagogic
Karaganda State University named after
E.A. Buketov
Karaganda, 100019, Kazakhstan

E-mail: d61975@rambler.ru

References

- Nazarbayev N.A. Kazakhstan 2030: Prosperity, Security and Welfare Improvement of All Kazakhstani People: Presidential Address to the People of Kazakhstan. Almaty. 1998.
- Baydenko V.I. Competence in Professional Education. Higher Education in Russia. 2004; 11: 78-84.
- 3. Serikov V.V. Competence-Based Model of the Content of Higher Education Path to a New Quality. Volgograd2008; 675.
- 4. Zimnaya I.A. Key Competencies as an Efficient and Targeted Competence-Based Approach to Education. Moscow2004; 51.
- Innovations in education. «East West» Association for Advanced Studies and Higher Education GmbH - Austria (Venna), 2014. -Volume 2.
- Mirza N.V., Mazhenova R.B. Competence-Based Approach in Preparing Bachelors and Masters. International Conference «Science:

- Integrating Theory and Practice». Bozeman, USA. 2014; 275-278.
- 7. Mirza N.V., Umpirovich M.I. Quality of education as the object of management. European Researcher. 2014; 4(1): 694-698.
- 8. Mirza N.V. Creative component of professional competence of a teacher. International Journal Of Applied And Fundamental Research. 2013; 2

 URL: www.science-sd.com/455-24286
- Mirza N.V., Mazhenova R.B. The influence of information and communication technologies on improving the educational process in high school. Seattle-2013: 4th International Academic Research Conference on Business, Education, Nature and Technology. Part 4: Kazakhstan. Seattle, WA, USA. 2013; 292-294.
- 10. Mirza N.V., Umpirovich M.I. Case method as a modern technology of professional-oriented training of students. European science review. Scientific journal. 2014; 2: 82-86.

8/8/2014