The Social Sciences 11 (16): 3853-3859, 2016

ISSN: 1818-5800

© Medwell Journals, 2016

# Innovative Technology is the Basis of the Formation of Professional Competence of Future Professionals in Primary School

<sup>1</sup>Amina Amirova, <sup>2</sup>Klara Buzaubakova, <sup>1</sup>Aimkul Akhmetova, <sup>1</sup>Meirgul Ospanbekova, <sup>2</sup>M. Abdirassilov and <sup>2</sup>Saltanat Aubakirova <sup>1</sup>Kazakh National Pedagogical University Abai, Dostyk Ave. 13, Almaty, 050010 Kazakhstan <sup>2</sup>Taraz State Pedagogical Institute Zhambyl Bald, Str., Tole Bi 62, Taraz, Kazakhstan

**Abstract:** The training, success and personal development of future specialists of primary classes is the process in which the creative activity functional continuously. It is characterized by the ability to find the continuation during the whole life of the teacher to effectively apply innovative technologies in teaching activities and the basis of formation of professional competence of teachers.

**Key words:** Professional competence, innovative technology, experts of primary classes, interactive methods, training

## INTRODUCTION

In the state program of education development of the Republic of Kazakhstan for 2011-2020, it provides for students' access to quality education for all, the development of communicative and professional competence. "However, it was concretized the need to move to an electronic educational system in the formation of professional competence of teachers and enhance their skills in the use of information technology. Today, it requires the use of innovative technologies in teaching all subjects for formation of professional competence of future teachers in primary school.

In the speech to the students of the University President Nursultan Nazarbayev said: "in today's world the power of the people lies primarily in knowledge and science. We must not forget that in our society we can achieve success only matching conscientious work with a deep knowledge. This is demand of today. You must master the science, to create own science and technology in Kazakhstan, its own position. If any professional will be striving to fulfill their job previously unknown way, the new method, only if he succeeds which nobody has reached. You are educated youth of the independent Kazakh people have to build your way and turn it into a big avenue leading to the development of the country! "this mandate will be the main task of receiving higher and postgraduate education as well as each team which prepares them.

The basis of important structural changes in the educational system of the country associated with the entry into the Bologna process. Of course, in terms of

innovation it requires organization of pedagogical process along with the development of global experience in training graduate and doctoral graduate education in the specialty 6M010200-Pedagogy and methodology of elementary education.

The term "innovation" comes from the English language, that means "the introduction of new." Many modern innovations have continuity with the historical experience and identical to the past. The innovation process is focused on the development and conscious on the formation process, the process of distribution, development and utilization of modern ideas, theories, methods, technologies, processes and meets certain criteria is relevant and tailored to the specific situation. It is aimed to improve the conscious system, provides for the introduction of a new order in terms of innovation, change his views and claim their participants.

The innovation process is an innovation that introduces new stable elements in the educational process, leads to a transition of the system from one situation to another and re-introduces the action, the activities of educational institutions associated with the creation, development, application and dissemination of innovation.

From this perspective, pedagogy of higher education in postgraduate education should take as a basis of innovative technologies to increase the activity of students for the formation of future specialists of the new scale value. Its main function is to form a conception of the world educational space of a higher level, providing a holistic training by influencing the preparation of an educated specialist.

#### MATERIALS AND METHODS

According to the American model the professional competence of the teacher includes discipline, ability to work independently, communication and self-development. Scientists in Sweden include the mind, morality, social, aesthetic and political aspects to professional competence of the teacher.

I.A. Zimnyaja characterized competence by the following features: the willingness to exercise competence relevant to the content of competence, knowledge, skills, attitudes toward objects, especially thinking, practice activities, emotional-volitional regulation process, introspection during the presentation of results of competence.

In psychological science concept of competence in creating a model of human development is considered based on the concept of behavior and actions of a person from a theoretical point of view as an integrated problem. It is used to achieve a face-quality result with the use of its resources in problem solving situations.

According to V.A. Slastenina, professional pedagogical competence is the unity of theoretical and practical preparedness required to perform the professional functions of professional activity which is transmitted through the functional structure of pedagogical activity of the teacher. In conclusion, we see how the researcher considers the professional competence of the teacher in the unity of theory and practice its readiness with creative teaching activities.

According to Bondarevskaya (1999), the phenomenon of professional competence is linked with teaching culture, the author connects it with the basic component of the educational process and comes to the conclusion that a high level of professional formation can be provided through examples of pedagogical culture.

According to Kagan (1974), there are several types of pedagogical culture: the culture of scholarship, culture experience and work culture. Form of labor is the inclusion of creativity in the main specialty. Creativity should be the main form of labor after higher education as it affects the improvement of the quality of work. Therefore, it is necessary to upgrade the training of future specialists.

After the consideration by Tatur (2009), ability and expertise in higher education is their ability and willingness to professional to ensure the social significance of the results of activities in the professional and social environment and the need to continuously improve their incentive and capacity (knowledge, skills, experience and personal qualities and so forth), manifested in practice to achieve creative success of understanding personal responsibility for it. To summarize the views of the researchers, it is possible to see that they

are considering the professional competence of future professionals with the educational culture, highlight great importance to the fact that creativity in teaching activities is an ideal spot.

According to V.V. Kraevskiy and I.Ya. Lerner, the concept of "competence" and "competency" is the ratio of dialectical categories of abstract and concrete, i.e., competency is the implementation of competence, competence in the activities. Explained in this way can be basic competence or indirectly and professional. The fact that in the formation of a lot of attention paid to the formation and development of the core competence of the person competent clarify the direction of their organization and it is known as the procedural basis for definition of education in the methodology of modern education. We see that the basis of this "concept" served as the findings of other researchers.

Aymauytov explained: "If the child after graduation will look at the world, at someone else's life and conscious mental eyes open knowledge, here, it is the main goal of education. The school in this regard should be strong foundation for the future improvement of the child". Analysis of the researcher's opinions modern outlook shows that he defined the purpose of education in the early 20th century. If even one of the main requirements of today is to prepare the person, able to freely enter into the global education, knowledge and skills, intellectual abilities of graduates at all levels should be considered as the basis of formation of professional competence of future professionals. Today, it provides a focus of educational content on human values which ensures implementation of the tasks of humanization of education.

B.T. Kenzhebekov states his opinion on the formation of professional competence of students in higher education this way: "professional competence is the unity of theoretical and practical training and the individual's ability to perform professional activities". According to the researcher, competence manifests itself in relation to the knowledge of the person, thought and activity in the manifestation of knowledge in the action proposed certain problems, decision-making, analysis of its course and outcome, constant introduction of rational amendments but not as heartless the learned knowledge.

One of the scientists, who in teaching science examines the concept of "competence" in conjunction with the concepts of ability, qualifications, ability, Kudaykulov A.M. concludes: "ability is individual personality traits which efficiently performs some action." It is characterized by means of operational, sustainable, high-quality performance. It is characterized by a high level of creativity, talent, wisdom and competitiveness (Kudaykulov, 2006).

Evaluation of opinions of state and foreign scientists about the professional competence of the teacher shows that their views are similar, they complement each other, since they include professional knowledge and skills, focus on social values, motivation for activity of speech, style, relationships, develop their creativity capacity, the ability of understanding in the relationship with the students, the development of methods of teaching subjects in institutes of higher education.

Upon entering the world educational space each person can realize itself as in the future as it is a competitive, professional authorized specialist will be able to go beyond its educational sphere. From this point of view A.S. Amirov allocates the following tendencies of postgraduate education is the following trends postgraduate education.

The transition higher academic fundamental education to vocational education that is its contents and technologies of the future professional activity of a specialist here in continuing education must be considered consistent and State to state kinetics skill. Activation of the quality of graduate and doctoral specialty pedagogy and methodology of primary education.

Strengthening the role of personal development complicates the task of professional development, it certainly requires along with the search for the perfect self-training of students graduates.

In higher professional education the introduction of the market mechanism, the quality management system, the goal of training graduate and doctoral students and the requirements for it are available the results of high-level unit tests which are an indicator of the effectiveness of education, success stories and others.

The analysis of the above trends postgraduate education, the purpose and content of education will be the basis of formation of the world educational space of a new model of training future professionals. This model realizes the development of core competencies that define the system in international practice professional readiness of graduates, his basic personality and creative ability.

In the educational area one of the most important goals of the teacher is creativity. This goal is accomplished by the organization of the curriculum and the learning process. The learning process is characterized as a space in which to be creative activity of the teacher. Creative talent of the teacher is evident in its harmonious educational culture, a culture of thinking in the analysis of knowledge, pedagogical interaction, culture, feelings and relationships.

The concept of professional competence of future specialist provides for the introduction of global cultural

values. The quality of knowledge is provided by three main factors: the content of the curriculum, the organization of training and professional competence of teachers. Let us examine each of them: order to Kazakh National Pedagogical University named after Abay to content development of educational programs for Master's and PhD doctoral studies in accordance with international standards, of course, means that the team professors-teachers entrusted with the awesome responsibility.

In compare of educational programs of compliance with international standards fully takes into account the study of foreign experience exchange with foreign scientists, especially technology education credit as a result of the researcher's association, the implementation of mobile meaningfulness, work in partnership and others.

The next factor that ensures the quality of knowledge, involves the development of methods used in the organization of the learning process of modern information technology and multimedia, interactive whiteboard, electronic textbooks, innovative technologies and interactive methods, electronic portfolio which shows the results of independent work master and doctoral students, lectures and workshops based on subjective relations, creative tasks for the development of creativity of students, "school of excellence" professors of excellence.

The next factor of professional competence of the teacher on the basis of personality covers the following aspects: the philosophical social, cultural. Is this.

Philosophical aspect of professional competence is interpretation activities arising from the need to reflexive personality, human qualities of the person when it is running, self-development of a person living in a basic medium of education.

The social aspect of professional competence is qualification united creative organization of subject-subjective teaching activities, self-development, self-organization, creative self-realization, professional personal development;

The cultural dimension of professional competence is comprehension of the personality of multiculturalism, ethnic-specific factors, the behavior in a friendly activity, the ability to engage in interpersonal and business relationships, creativity in organizing intercultural activities combined.

The combined qualities of personality that form the basis of professional competence of masters and doctoral students of special pedagogy and methodology of elementary education in postgraduate education include competence are considered in the unity of teaching and subject disciplines, consisting of communicative, didactic and personal components.

Communicative component includes the development of types of oral and written communication on the subject. The didactic component affects the analysis of the fundamental knowledge, skills, creative activity of the teacher, the potential for knowledge sharing, the situation and the ability to entry into the activities of independent design technology in teaching students, the logical structure of the educational process, the possibility of solving the problems, methods of self-mobility solution of pedagogical problems, creative thinking, improving his professional and private education.

The personal component of the teacher in postgraduate education is evident in his professional are pedagogical activities. Educational activity is characterized by social, cultural development. The social side of the teacher is the creative style of the teacher, viewed in connection with the problem of creative formation. Creative style of the teacher covers the unit and means of teaching activities, i.e., creativity completely. The concept of creative style associated with the independent work of teachers, activity, creativity, skill and responsibility.

During the reconstruction of post-graduate education is provided by self-realization of students, development of professional competence, the learning process with the creative search. For this preparedness tutor to the lesson comes out on top as the creativity of the teacher in preparing creative tasks in teaching students the content knowledge in each subject of course is to influence the formation of creativity, imagination, reflection professional masters and doctoral students.

The term "Reflention" was first used in foreign sources, in some cases as "recursive thinking", a consequence replaced by the term "Thinking About Me" (self- referent thought). The educational philosophy and psychology books by G.V. Olporta "self-reflection" (sense of self), this term is used as a reflection of the concept of introspection (Allport, 1988). The idea of the views of Reflection observed in human cognitive activity. Despite the variety of definitions, reflection is the human attention to himself.

# RESULTS AND DISCUSSION

The term reflection (from lat. reslexio-return to the initial display and also a term denoting the act of educational research. The term "Refleksione" attentive consciousness characterized by mental state reasoning in their thought.

In psychological dictionary, reflection is defined as the inner psychological process of recognition of the acts and states of personality (Petrovsky and Yaroshevsky, 1990).

In social psychology the Reflection of the subject, actor or community communities, actually appears in the form of awareness of its as a market of science and individual estimate the value of self or other. Reflection is not just a simple or a subject of education the government does not understand that other "reflexional" personality, individual differences, emotional reactions and concepts cognitive (therefore, the problem of communication) knowledge and understanding of the definition. Reflection is subjects, one of the features of construction, maintenance, reconstruction, charged to the agents with each other in a complex "mirror" the process of manifestation (Rapatsevich, 2005). In addition to reflection subject-specific actions of the entity in relation to the situation, content, action and perception of control includes the elements of coordination in accordance with changing conditions.

Reflex mechanisms based on self-regulation of human actions in particular the educational-cognitive activity may be the basis of self-regulation. Reflection directly to the person, actions from the proper exit, trying to become above, consciously regulated and controlled will allow you to turn it into a subject of analysis.

A teacher organizes learner's training reflection in the classroom, shapes his reflective ability in training activities. In the works of G.W. Leibniz reflective activity is considered as a result of abstraction of the subject (Gershunsky, 1998). This is the subject of future teachers content to students in performing actions, being able to know what is the achievement of a certain level.

Awareness of training, reflection as its cognitive activity, in many cases, coincides with the views of philosophers about human development. In the works of I. Ilyina is emphasized as: "the task of education is not the filling of memory or the creation of intelligence, it's developing skills of knowledge of the world". Consequently, the implementation of reflection is not knowledge of subject knowledge, it's a knowledge of the ability of interaction with him. In other cares, in studies of I.A. Ilyina, reflection allows to get deeper access to knowledge.

A.H. Alimov especially specifies in his researches that: "availability of knowledge at the personality is not enough today. The main goal of an education system the self-report to analyze thought and actions, estimation of the of an opportunity and capability, performs development and prosperity, a capability most effectively on forming of responsibility of the person. Only the personality which could create such reflexive new qualities in the conditions of globalizations will be able to find the place in life and it is productive to work in professional activities for the benefit of society (Alimov, 2013).

In general, during researching and examination of educational activity of reflections in pedagogical works of scientists in the terms "reflection" "consciousness" and "emotions" can be applied to replace each other.

But, nevertheless, in the case when it is not more awareness in education, the understanding of the action to understand how the content is discipline-related, primarily is a consequence of reflective activity. Therefore, the knowledge and the ability to distinguish them in the learning process in the preparation of future teachers concepts, development of skills training to limit the space of action of these reflexionen be taken into account.

The educations revealed the place of an educational refleñtion in contents, defining regularities specifics of development, educational and educational actions makes a theoretical basis of formation and selection of contents. Multipurpose research activity of an educational refleñtion allows to disclose qualities of the subject in educational activity their value for the further development which is trained. In the history of development of pedagogical thinking scientists shows the development of their personality and understanding of the educational process.

According to scientists is determined by the role of the teacher in the process of self-determination of students, self-transformation in the process of teaching reflection activities.

In psychological and pedagogical researches reflection of primary school teachers in training mental make stand out as new professionals, the result of its formation as a legal entity and acts as the means. Thus, in the development of theoretical and practical training works, allows examination reflexional erasing students.

The urgency of the problem of training of future primary school teachers the development of students as evidenced by the expressed thoughts reflexes. The value of the received knowledge of the future teachers within the framework of axiological information necessary to determine the features of development studied reflexes important for learning. Determination of place and importance in educational reflexionen in the primary education content research, expertise, understanding of features of its content and more: knowing and not knowing the boundaries understanding of the objectives of the training activities, stages, methods, justification of actions and to understand and relevant difficulties may be the actions, results and ways of overcoming them know because their actions to look critically, to analyze, to improve, your actions, to assess, reflexes development of students on the basis of innovative technologies, allows on-new to plan the learning process.

The term "Reflection" and analysis of the theoretical aspects of the concept, development of learning activities of students allows to the future teachers understand reflexes. To do this, future teachers need to master the whole set of actions, reflective, their actions, having covered the basics, learning the knowledge necessary for their results. If learning to pay more attention to the development of educational reflections of students, would provide the result of their own activities and to avoid differences, relations and prevention of learning difficulties, develop self-personal organization for themselves.

By use of compulsory teaching of the subject "gaming", "interview", "training", "creative group tasks", "presentation", "video tapes" and other innovative technologies can form a correct view of students, to develop design capabilities, improve communication and reflection skills.

When the teacher offers each task, he wants to achieve goals through creative task. For the implementation of learner - centered learning, he should be able to influence the emergence of motivation among students, to be able to create a targeted situation. Only then technique tasks through the use of innovative technologies in the learning process can achieve a specific result. For example, select the following prerequisites for the formation of professional competence of undergraduates based on innovative technologies, shows the depth of knowledge acquired in the learning process and results must self-search.

First, the teacher through the use of innovative technologies in the development of new knowledge in the learning process by offering different tasks in the work with interactive whiteboard, when executed should contribute to the development of new knowledge with the search.

Second, passed on the subject in the undergraduate creation of an electronic portfolio, showing the results of independent work should be able to use in the search tasks innovative technologies as necessary to fulfill the training requirements for the credit system.

Third, when performing tasks on the subject passed should be able to engage in creative search, organize their thoughts, respectively kinds of problems, to make conclusions and qualified to use innovative technology.

Fourth, it is manifested in the conduct research on a particular topic, the protection of the "project", "term paper", "research paper" on the subject and report the result of his research in scientific conferences.

Since, learning technologies creatively chosen in accordance with the purpose of topics, search and develop the creativity of students during the development of new material.

For example, the task to use the Interactive Method "Brainstorm": what methods can be used to increase the activity of thinking to perform creative tasks? Motivate your opinion.

What do you think, "How can I create a group to organize a team and work in a group to do the job intended for creative question?". Argues examples.

The following task: Creative nature. Empathy. Imagine that you are "live" during the development of an object or subject (knowledge, training, etc.), Describe your feelings and others.

Undergraduates are offered a job to a generalization of his thoughts on reflection. For Example:

What you got the job search on the research topic and what do you think what is his solution? What difficulties may arise in implementing it in practice? Master student must motivate your answer according to the problems svogo study.

As we understand professional competence, what we notice it in modern practice? Motivate his thought examples.

In the learning process decide whether creative tasks issues of professional competence? What is your opinion? Motivate specific examples.

The next kind of reflexive jobs offered in the form of videos. For example, video footage shows a fragment of a lesson the teacher and seminar Sh.Amonashvili. Then given the task is to make a comparative conclusion and opinion on the professional competence of two teachers in teaching creativity.

Next discovering cognitive task. Future elementary school teachers are to develop the project for the training of students in the project.

To prepare a draft on the same topic. Undergraduates are divided into four groups, each group for the initial class (1-4) prepares a research project on the same topic. The scientific project work in school during limited to the following structure.

The preparatory period: Clarification of project themes. Stimulating students in choosing a topic in one direction. Education plan the work, taking into account the views of each student group. Each student shares his thoughts on the basis of their life experience (if any), together determine the main purpose of the project.

Planning divided into groups: Show the way of collecting and analyzing information. Determine the performance of each member of the group. Orient the students to independently collect information. Listen solution brainstorming into account the opinion of each member of the group, if necessary, to share their thoughts. Check the

diaries of students on the project. Determine the function of each among a group, plan the steps of determining its themes and work, sets the deadline to achieve the primary outcome. Show willingness to perform the job.

Research: Collection of information, analysis of intermediate results, the basic research tools: interviews, questionnaires, control, analysis of different information. Control diary student individually conduct a conversation with each leader and team members, analysis, orient the work by comparing the results; drawing up of individual and pair work questionnaire; if necessary, the formation of relationships with community organizations. Enhance their knowledge in each subject the industry, meet different public works, to form a creative quality, activity, purposefulness.

**Discussion of the results:** Information analysis, decision making, planning in what form will be presented. Monitors, advises. Assessing the work of each student in the group is calling for an agreement for joint protection and mutual respect, equipped with the necessary for the presentation of audio-video equipment. It defines the role of each among a group of notes among the most basic information combined and clarifies issues of concern preparing for a joint decision.

**Presentation of the work:** Listening, asking questions of concern, saying promotes student. Reports on the results. Carefully listen to each other, each other's thoughts continue with the culture of speech.

**Assessment and planning:** Evaluate the creative work of workers leads to larger goals. Discussing team, give an estimate of each other, themselves, plan future work.

Thus, we can come to the conclusion that the content and technology knowledge is transferred to the learning process during the post-graduate education is a source of formation of each of a student striving for different concepts that form the basis of the trajectory of knowledge, creative search and professional competence. In the final experiment to test the knowledge of a student is to discount assessment tasks, test, profile, educational and cognitive tasks and others. Now we give examples to test tasks within the topic. The main advantages of innovation to innovation:

- Innovation is a 1 time and has a history of innovation occur
- Innovation offers to management are organizational model and innovation the content

- Innovation collective and innovation is the result of individual efforts
- Innovation rises in circumstances of financial and economic activity and innovation-methodical
- Innovation is a way to introduce novelty, innovation is a search tool

In what order there is an innovative period:

- Sales-distribution of-krizis-trivialization
- The crisis-trivialization-distribution-sales-appearance
- The appearance-sales-distribution-trivialization-crisis
- Thinking-feeling-activities-design-diagnostics
- Planirovanie-myshlenie-proektirovanie-result

Who introduced into circulation the term "competence":

- White
- R. Challen
- Ratzel
- J. Washington
- A Smith

The term "competence" in treatment introduced White to describe

- Good work, formed on the basis of training in the educational process, stay graduate educational institution to fulfill its
- Market mechanism of self-regulation of the economy
- A set of rules introducing everyday life
- Efforts to identify, analyze
- Sound distortion with proper hearing spoken innervations apparatus

## CONCLUSION

So in conclusion, we see that the formation of professional competence of future professionals in primary school based on the application of innovative technologies in the learning process is manifested in the performance of search tasks, the development of research projects and protect them, to establish a link between learning and cognitive tasks and their research topics.

In the course of training for the development of the level of personal success and teacher in the conscious control of the results of its activities reflective component shall prevail. By reflective component mainly include assessment, control of the teacher and the contents of the didactic, communicative components that are part of professional competence. Of course, that in the practice of the teacher replenished reflective component manifested personal competence and impact on students.

As a result, the personal success of the teacher, the presence of a subjective relationship with the students, improving their own knowledge, skills, professional development, innovative technologies that form the personality of a student leads to creativity. Thus, we conclude that the search for future specialists of primary school, success, self-development is a process in which creative activity work continuously. It is characterized by the ability to find the continuation of a lifelong educator, effective use of innovative technologies in teaching activities and is the basis of formation of professional competence of teachers.

### REFERENCES

- Alimov, A.H., 2013. Application Active Learning Methods in the High School: Text book. Kantana Press, Almaty,, Pages: 448.
- Allport, W., 1988. The Person in Psychology. Beacon Press, Boston, Pages: 480.
- Bondarevskaya, E.V., 1999. Pedagogy: Personality in Humanistic Theories and Educational Systems. Rostov-on-Don, Moscow.
- Gershunsky, B.S., 1998. Philosophy of Education for the 21st Century. B.S. Gershunsky, Moscow, Pages: 607.
- Kagan, M.S., 1974. Human Activity (Systems Analysis Experience). Vol. 2, House of Political Literature, Moscow.
- Kudaykulov, A.M., 2006. Creative and Competitive Ability. School XXI Century, Almaty, Pages: 76.
- Petrovsky A.V. and M.G. Yaroshevsky, 1990. Psychological Dictionary. Politizdat, Moscow, Pages: 321.
- Rapatsevich, E.S., 2005. Pedagogy: Big Modern Encyclopedia. Sovrem. Slovo, Minsk, Pages: 720.
- Tatur, J.G., 2009. Educational Process at the University of Moscow. University of Moscow, Moscow.