

THE THEORETICAL FOUNDATIONS OF THE FORMATION OF THE FUTURE PROFESSIONALS CREATIVE THINKING

Aigerim Bogenbayeva*, Rakhat Salamatova*, Indira Sultaniyazova*,
Miramkul Sarsembayeva*, Fauzia Orazbaeva* and Yerkin Koyangaliyev*

Abstract: At the present stage the social development requires from individual to be ready to face and interact with high standards. In this regard, society and the education system require future specialists to keep their personal values, and in any case to be able to keep and position in life. University should establish abilities to cope with the competition in his/her profession and exceptional personal qualities. Creativity is one of the key factors to accomplish this goal.

As the values of life through innovation in all areas of activity is recognized as a result of constant creative activity to the development of a viable future. Therefore, the development of individual creativity, deep phase of its spiritual, motivational, educational value is recognized as an important benchmark.

Article shows creativity, creative thinking and creative concept of pedagogy. Development of language teaching through students' creative thinking is showed as the an important part of education.

Keywords: Creativity, education, creative thinking.

INTRODUCTION

Education of individuals as the quality of the human capital has influenced the Republic of Kazakhstan to join the advanced developing countries in the world arena. President of the Republic of Kazakhstan Nursultan Nazarbayev (2010) in his speech to the people of Kazakhstan called "Kazakhstan in the way of rapid economic, social and political modernization, the country which is not able to develop knowledge in the XXI century is exposed to the recession".

In this regard, the priority of the educational process rather than mechanical knowledge and skills in the context of information and intellectual resources can be independently analyzed and dealt with the idea of using a rapidly changing, promote and develop self-determined to accelerate the development of the person.

By B.S.Gershunskiy (1998), value of 'education' category is on the each person's right to education in the implementation of educational policy in order to meet the full uniqueness of the person.

By A.S.Kuskimbayeva (2013), "Need to learn the techniques of critical thinking are needed especially during times of instability in the crisis of human society. Critical thinking and rational thinking as a form of, structure normalizes ineffective ideas".

* Abai Kazakh National Pedagogical University, Almaty, Kazakhstan

Therefore, the possibility of professional thinking, teaching classes demanded in today's society of knowledge and technologies to track trends in the development of information technology, be using his experience plays an important role.

The creativity as a sign of the quality of the individual shall promote the development of the future's comprehensive efforts of the will of its capacity in the mental and moral thinking, which is the ability to imagine the emotional and intellectual actions appeared. In addition, the creativity around the dignity of the individual in the educational and social opportunities direction, by taking into account a realistic approach shall be a goal to solve the real problem.

MATERIALS AND METHODS

The purpose of the present stage of general education knowledge is to obtain basis of skills and competencies in accordance with the requirements of the society, and prepare decision-making and creative, capable and effective person who can achieve goals by creative thinking. Various changes taking place in society requires the development of the creative potential of young people.

The value of the educational research and creative mechanisms that allows creating a creative person is criteria of successful person and is one of the relevant differentiations of theoretical and applied aspects. Creative thinking is top form of the people who acts on their own.

Creative thinking is made as a result of an act of creative and active cognitive research conclusions and recommendations in this direction, taking into account the importance of disclosing the contents of the subject matter of this concept.

A prominent psychologist L.Vigotskiy (1960) in his work shows 'creative thinking' as a new concept.

Y.Ponomarev (1999), one of the psychologists who examine this issue and says evaluates 'creative thinking' as 'development'. After all, every news, especially in an intellectual sense evaluates child psychology to a qualitatively new level. This view satisfies requirements of modern pedagogy as reasonable.

Definitions of creativity began to change as studied. In recent years, the word 'creative' stands with the word 'creativity'. William Duff paid special attention in XVIII century to the creativity. The idea of creative problem-solving adaptive (adaptive) and adaptation (innovative), and a decision between divergent and convergent thinking styles are foreseen. Creative works of K.D.Ushinskiy (1948) in the development are very important. It requires taking into account the specific features of the student management, the nature of the content and learning material, training, right choice of methods in accordance with the amount of reading with transparency. At the same time, he paid special attention to the students' independent knowledge of independent thinking, independent functioning rods and has earmarked the development of skills.

By Ushinskiy learning process should be based on the intellectual development of the child and his/her basis of the ability of independent thinking and own decision to develop the way of self-acquired knowledge. He was giving special attention to the process of learning and cognitive activity, the amount of material importance in determining the nature and methods of teaching students, the features of the development of mind and ability to strictly maintain a gradual and always be in a chain of the material and presentation of the information, opinions, conclusions demanded to be a clear and accurate pronunciation. According to K.D. Ushinskiy development and training, helps to develop human consciousness, imagination and the preparation of the actions toward to the social and labor orientation. Training by education, develop mental abilities and moral qualities of the student helps prepare them to the life.

Creativity issues also take place in the works of A.S. Makarenko. A.S. Makarenko (1972) devoted his works to the formation and development of the creative potential of the teacher. According to A.S. Makarenko the value of self-organization, excellence in professional services, providing a high level of complex as the property of the person, is to start creative teaching.

The great thinker Abai said that “Man will be distinguished from man only by mind, science, conscience and behavior. In addition, it is ahead of things the way everything is so foolish” (Kushkimbayeva, 2013); it means that the idea that the creative person is always is on another level.

Y. Altynsaryn (1994) in his works paid special attention to the development of skills, Magzhan Zhumabayev was the first who introduced the content teacher’s of education.

Thus, these days the recognition of personal and social terms turns to the issue of the creative achievements of modern psychology and pedagogy. Should be noted that at present, is the growing interest in the formation of creativity among the students, teachers and psychologists. The increase interest in creative, competitive, due to the social need for specialists is shown. This led to the formation of the creativity of the criteria for determining the need for creative and mental ability to review the theoretical nature of the sources of creativity, there is a need to study the conditions allowing the development of creativity potential.

By A.V. Brushlinskiy (1996) the creativity is not mental structure, but, on the contrary, is a sign of any basis for thinking of the idea. According to the scientist, as a result of the phenomenon of human thinking, which is always something new activity, specifically defines the terms of the relationship changes but also makes new forms and methods of the former. Thinking as continuous phenomenon, as well as to find and open the new will always a lesser extent, even if the actual transmission of a variety of creative ideas for an individual noticed the idea of discovery research. For this reason, scientists say that dividing thinking into reproductive and productive

types is illegal, there is just as important personal search and 'simple' thinking only, so each time a certain amount of thinking is formulated as reflected in the creative product.

For our study opinion of A.V. Bruslinskiy is valuable, who said that thinking as a process by acting of a subject includes personal aspects of individual as motivation, skills, reflection.

Famous scientist, psychologist A.M. Matyushkin (1977) carried out integrated consideration of being gifted as the phenomenon as the background a creative development of students.

According to this concept, the components of the genius as the following can be seen: the role of the priorities of the internal motivation, goal setting and acting to address the issue of access to creative solutions to research activity and predictive capabilities.

A.M. Matyushkin in his writings carried out person's mental capacity, creativity and teacher circumstances which led him/her to the development of intelligence is only in the case of permanent jobs.

In the course of the study the following thoughts of A.M. Matyushkin were particular interest for us: individual creativity and, most importantly, the importance of learning not to be afraid to make an error. The fear of error discourages individual initiative in problem solving tasks. Afraid of the mistake, he/she will be inclined to ask for help and will not solve the problem. Therefore, the increased difficulties which alternate with the educational process and the development of creativity and intelligence to solve on their own do not work. For similar reasons, by thinking person cannot develop itself automatically. An important requirement of the development of thinking, resulting in the need for new knowledge to study the performance of the tasks.

This opinion is valuable for our research. Using easy, problem less, reproductive tasks on a regular basis in the learning process will limit the scope of the development of creative thinking ability of students. Therefore, we choose these specific circumstances in the experimental part of the work aimed at the development of creative thinking of the future professionals.

By modern psychology the concept of thinking is understand. Thinking is closely related to the language which associated with the social situation of mental process, thereby a reflection of the indirect and direct things in the world. This image is recognized and attempts to combine the analysis of human thought.

Sensation and perception are random concurrent connections of each of the parties to the physical phenomena. Data of sensations and thinking opened and compared and relations between them have been discovered and classified. Based on the sensory properties of objects and phenomena recognized on the basis of matter is not directly through the deepening of new ways of thinking and a common value

around the world to understand the subtleties of reality allows the recognition of contacts and relationships on the basis of the rule of law.

By training is possible to develop thinking through the following qualities: flexibility of thinking, depth and width of thinking, goals of thinking, feasibility commonality of thinking, and reasonableness of the fairness of thinking.

Those properties improve culture of thinking; help to develop their intellectual potential thinking of students.

Learning process will help not only in the formation of a systematic way of thinking as well as in the development of comprehensive individual. Thinking culture is not an inherent of the individual, is formed during the process of cognition. Through the development of the thinking apparatus increase the chances of a person's knowledge, to a deeper look into the issue at the original value. Learning requires from students serious mental training, strong, smart, well-developed imagination and a creative approach to learning. A new set of issues and problems of independent thinking person is to learn new ways to solve them, and it is capable of thinking during the activity, that is, the desire to solve their own problems and issues faced, and ways and means associated with his/her own decisions.

Despite the different views the authors have the same opinion that thinking is inherently has social nature. It has features of social importance as developed in the process of their social relationships.

A.E.Abilkassimova (1994) in her writings pointed about one of the properties in the development of creative thinking of person: "Cognitive self research of individual is multifaceted education, cognitive activity, which is the result of the identification process and the will of suspected self-tuning image; cognitive self research behavior motive and synthesis of self research; the student's behavior is characterized by a constant look for cognition. However, for the justification of such cognitive self research analysis of the individual is needed. Individual formation is foundation for the cognitive development".

The term 'productive thinking' is widely used in the scientific literature to determine the student's creative activity.

The concept by Z.I.Kalmikova (1981) "The special type of thinking is the product of thinking, the result of which has been separated from the others, the subject will be something new in principle to a new level" is the closest one to our research.

At the same time an important aspect of creativity known as the goal orientation and recognized to ensure way to achieve it. And the goal is the ability to determine issues, to find solutions, as well as involvement of important issues, such as the dynamics of forward thinking will help to overcome the stereotypical methods.

The concept 'creativity' in domestic scientific lexicon was only introduced the in the recent years. It must be based on complexity of determining the type of strict

scientific category of this traditional content. The word creativity comes from is Latin and stands for 'to create a level of creative talent, creativity, manufacture'. Everything to create is possible, but every issue of this process is not creativity. The essence of creativity to think of different methods of carrying out duties, a certain level of results means the beginning of each method. In this case, the ability to implement the ideas of creativity is to achieve a certain goal as the ability to determine the quality of the person.

Before determine the value of the content and creative thinking let us explain each concept.

Despite the diversity of the concept of creativity, it is components (intelligence, motivation, etc.) to detect talents as one of the quality of the individual's mental attitude. In any case, the 'high-performance' as an integral part of the genius than other factors set to achieve new goals. Thus, the 'creativity' is interpreted differently in each concept. Among them following was the most important for our work.

Well known foreign psychologists R.Sternberg (1998) considers the idea of human creativity as a force of thought, T.Amabile (1982) said that creativity is "the possibility to violate the established order of succession of ideas in the thinking process".

J.Gilford (1965) was the one of the first American psychologist studied creativity. 16 factor of capacity of the creativity were shown in Gildford's works. They are: mental speed, speed of thought and independent thinking, the ability to feel the problem, etc. J. Gilford made conclusion that creativity in the development of creative thinking, thinking that is determined by the characteristics of the four priorities.

1. In contrast to the latter idea looks like the intellectual pursuit of novelty.
2. Semantic flexibility, which is the ability to look at the new facility.
3. Being able to see backing of an object depending on the type.
4. Possibility for the formation of new ideas and the ability to produce a variety of ideas in the absence of the preconditions.

He combined all of this by the name 'divergent thinking'. J.Guildford its intelligence is able to model the structure of cognitive thinking convergent type, and is associated with divergent thinking. Convergent thinking aimed solving one type of problem thinking. Divergent thinking based on the imagination of many possible solutions together.

Divergent thinking, according to some researchers, is the basis of creativity. Divergent thinking actions of a single, intuitive, with a certificate of relativistic J.Gildford, noted difference between convergence and divergence as the two mental operations.

J. Gildford considered divergence actions as the basis of creativity, which is the creative abilities. Divergent thinking based on utopia. Unlike the results obtained by the divergent thinking has a variety of answers.

Final result of thought is not determined by the information provided. However, divergent thinking is not included in the process of decision making, because testing and error method of thinking is wherever. And new ideas and individual personalization will be the most favorable conditions.

As one of the main characteristics of the creative person is his/her cognitive talent, sensitivity to problems caused, acting in serious cases based on an independent behavior features.

D.Vekslar (1971), R.Sternberg (1998) were representatives of the second approach, by evidence of them the level of a highly developed intelligence is the key to a high of creative thinking. The process of creativity shall not be considered as a form of activity.

The third approach is related to opinions of the representatives of the different opinions on the natural resources of creativity.

In modern studies intellectual and non-intellectual creativity (personal and social) factors recognized as a multi-dimensional phenomenon. Research in this field described a combination of intellectual creativity and personal factors. B.D.Bogoyavlenskaya (2002) in her works introduced the concept of creative activity of the person as creative types depend on the typical structure of the person. Author gives a definition to the creativity as an action caused by the desire to go beyond of the situation. She concluded that creativity is specific to the any innovative person, regardless of profession.

Compared to the convergent thinking which aimed at specific decisions of the problems, divergent thinking appears when ideas are known but the ways to solve are still unknown.

English researcher K.Taylor (2002) does not consider creativity as a unique factor, on the contrary, as set of different methods to understand the various levels. The scientist examines 52 separate criteria of geniality. He puts forward two types of divergent thinking, the personal commitment products: abstract creative thinking is readiness to resolve the issue; reflection as the search for a solution leading to the correctness of the active real action.

T.P.Jones (1972) said that creativity in the cases of social relations arising from the work is shown as unexpected performance, as based on his knowledge and ability. In addition, the design of information through associations, will be another step to solve the problem of the comments heard during the creative process, creative highlights the impact of the unexpected emergence of a new decision.

J. Guildford's successor, an American psychologist P. Torrance (1988) believes that creativity is not a special, is the personal behavior and productive thinking ability, the ability to share, based on the total amount of intelligence.

Creativity also appears in the case of lower education; will be appeared during negotiation and interaction with the new structure and the information; in the process of identification of information; in the process of finding and testing new solutions and in the process of reporting the results. P. Torrance deficiencies creativity as gaps in knowledge, and in other cases such as imbalance that is needed at the time of the adoption of conflict. It is the search for creative decision making process problem, check the forecast profit forecast and its formation, modification and divided into search results. This definition of P. Torrance creativity, does not disable other types of thinking.

In the study of L. Terstoun (1974) creative abilities is not proportional to intellectual abilities and creativity has the following aspects: speed to receive information, ability to organize ideas; intellectual factors of cognitive activity (concentration of attention, sensitivity to new ideas; the state of consciousness).

By F. Barron (1981) considers creativity as unexpected process followed by the internal perspective of creative thinking and without any specific processing is the main issue.

Thus, define creativity through changes in cognitive looks is aimed to assess factors and educational works.

Currently, there are four main aspects of the study of creativity: the creative process, creative product, creative person, creative environment. These methods are often used in combination.

L. B. Yermolayeva Tomina (2003) by summarizing the experience of foreign researchers in the study of creativity determines creativity that there is a person along the various levels of skills and defines the following main features:

- Sensitivity to the new problems;
- The width of the concepts of the association;
- Speed of thought from one category to another, the ability to switch from one method to the second one;
- No ordinary thinking -independence, individuality, intelligence decision.

In most studies, creative thinking is considered as a set of personality characteristics influencing the emergence of creativity. Nowadays, during the development of science in modern psychology given above 'creativity' concept cannot be taken as a unique identifier and the system still requires in-depth study to determine the structural component of creativity.

In addition, by many psychologists creativity is ability shown in quickly problem solving cases, to produce different ideas, and a special system of traditional thinking;

some of the creativity necessary for the formation of the creative abilities of thinking and welcomes the concept to include a set of personality traits.

Currently, there are different approaches to determining the nature of creativity. Therefore, the researchers cannot help to meet the same unique components. Some definitions of creativity in terms of performance, formed as a result of action; some have appeared on the basis of the process in terms of personal qualities. Some of the authors described 'creativity' as a ability to meet only in rare special types, while others say all of the people who formed the creative abilities. In addition creativity often considered as the opposite of visible, general methods. In this regard, the creativity and research work in the field of theoretical analysis can be divided into the following main issues.

1. Creativity is the ability to adapt to the needs of new methods and new products. This ability gives a possibility to recognize the news consciousness or unconsciousness, regardless of the nature of the processes.
2. The creation of a new creative product often depends on the personality of the individual and its internal motivation.
3. In the creative process, the special properties of the product and their equivalence are unique specific tasks.
4. Creative products can be of different nature: Teacher's new decisions, and the opening of new processes, creating music, pictures or writing poems, a new philosophical systems, social and economic problems, and others.

Establishing rules for the formation of the creative thinking of the future experts allow identifying the psychological and pedagogical patterns.

The methodology of the legality of the system assembly for the formation of creative thinking in terms of all of the major internal and external communications. In the frame of certain discovered jurisdictions, this process provides real opportunities for the establishment of effective and high-quality laws and to communicate directly with one another, updated, and more.

Creative thinking is not a unique phenomenon. It can develop in each person. Only the implementation of its environment is subject to certain conditions. The concept 'condition' in science provides the basis for the emergence of the concept of certain phenomena which is formulated as a philosophical category. Conditions develop environment which arise phenomena and situation. In our research concepts called 'teaching conditions' and 'pedagogical grounds' are the concepts of education of the higher education institutions in accordance with the specifics of the process. This allowed studying 'teaching conditions' in two categories.

CONCLUSION

Formation of creative thinking is a problematic issue. It is based on the process of globalization and public awareness.

By analyzing the views of Kazakhstani and foreign psychologists and teachers on the phenomenon of creativity, we think that creative thinking of the future professionals is their understanding of the mechanisms of personal logical and heuristic approaches and the ratio of the value to create an entity that is found in the main categories and to solve the problem which property is characterized by the use of a reasonable solutions. The person by developing the creative thinking raises himself/herself to find unusual solution to the problem caused by the reason and will be is able to assess the results by training reflective form.

Creative thinking ability in the process of training of future professionals is shown by their humanistic (the formation of a creative person, personalization), target (human actions allow the process of formation of the new target), important (to the disclosure of the value of the real objects and phenomena on the basis of the experience of the understandable linking reached a certain value and importance of knowledge), creative (cultural development of important and previously unknown product) functions.

Formation of the creative thinking of future professionals in the process of higher education reflects the intellectual process which is based on the phenomenon and creative action.

References

- Abilkassimova A.E. (1994). The formation of cognitive activity of students. Almaty: Bilim.
- Altynsaryn Y. (1994). Selected works. Almaty.
- Barron F., Harrington D. (1981). Creativity, intelligence and personality. *Annual Review of Psychology*. volume 32, p. 439-476. <http://www.annualreviews.org/doi/abs/10.1146/annurev.ps.32.020181.002255>.
- Bogoyavlenskaya D.B. (2002). *Psychology of creativity*. Moscow: Academy.
- Brushlinskiy A.V. (1996). *Subject: thinking, teaching, imagination*. Moscow: MODEK.
- Gershunskiy B.S. (1998). *Philosophy of education*. Moscow: Moscow psychology-social Institute.
- Gilford J. (1965). *Three sides of the intellect*. Moscow.
- Jones T.P. (1972). *Creative learning in perspective*. London: London Press, 1972.
- Kalmikova Z.I. (1981). *Productive thinking as a basis for learning*. Moscow: Pedagogy.
- Kushkimbayeva A.S. (2013). Language learners the teaching of the Kazakh language according to the technology of critical thinking development. *Bulleten of KazNPU named Abai*, volume 3(45).
- Makarenko A.S. (1972). *The team of personality*. Moscow.: Pedagogy.
- Matyushkin A.M. (1977). *Problems of psychology in the graduate school*. Moscow: Knowledge.
- Nazarbayev N.A. (2010). *Message: New Kazakhstan in the new world*. Astana.
- Ponomarev Y.A. (1999). *Psychology of creation*. Moscow.
- Amabile T.M. (1982). Social psychology of creativity: A consensual assessment technique. *Journal of Personality and Social Psychology*, volume 43, issue 5, p.997-1013.

<http://psycnet.apa.org/doi/10.1037/0022-3514.43.5.997>

Sternberg R. (1998). Investment theory of creativity. *Psychology*, volume 2, p.144-160.

Taylor K. (2002). *Psychological tests and exercises for children*. Moscow: Aprel-Press.

Terstoun L. (1974). *The Torrance Test of creative thinking: Technical-norm manual*.

Torrance E.P. (1998). *The nature of creativity*. Cambridge: Cambridge Press.

Ushinskiy K.D. (1948). Ушинский К.Д. Saint-Petersburg.

Vekslar D. (1971). *Creativity and education*. London: Rotledge&Kegan.

Vygotskiy L.S. (1960). *The development of higher psychological functions*. Moscow.

Yermolayeva-Tomina L.B. (2003). *Psychology of artistic creativity*. Moscow: Academic Project.

