FORMATION OF CREATIVE ABILITIES OF PRIMARY SCHOOL STUDENTS WITH METHODS OF INTERACTIVE METHODS AND TECHNOLOGY

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ABSTRACT

The article describes the analysis of literature on the concept of creativity, creativity, as well as the principles and components of the formation of creative abilities of primary school students

Keywords: Innovation, creativity, creativity, intellectual components, intellectual activity.

INTRODODUCTION, LITREATURE REVIEW AND DISCUSSION

Modern education at all levels practically has one main goal: to give a person knowledge about himself and about the world around him, to teach him how to live using this knowledge for the benefit of himself and society, to contribute to the realization of personal opportunities in his chosen profession. Based on this, getting an education is not a goal, but a means that is a necessity to achieve more significant, strategic goals in lifeⁱ.

An analysis of the scientific literature shows that today the term "creativity" does not have a single academic definition and interpretation, personifying in the minds of people all the valuable creative and intellectual components of a person's personality, which together make it possible to call him a creator. In accordance with the existing priorities, some authors give this term a more practical meaning, considering it possible to purposefully develop creative abilities. Abraham Maslow, the founder of humanistic psychology, defines creativity as a fundamental characteristic of human nature, the potential given to every person from birth, as well as a special way of perceiving or interacting with reality. Based on this definition, creativity can be defined as the ability or skill to see and perceive surrounding objects and events in a new, unusual perspectiveⁱⁱ.

According to Asadov, Yu.M., the most valuable feature of creative potential is its high role in innovation. Innovation as an intellectual array, which is essentially a product of the activity of human intellect, is the most systematic and visual result of using creative potential. And accordingly, it is innovations that have the greatest impact on the development of scientific and technological progressⁱⁱⁱ.

Abdurakhmanov R.B. and others. Under the creative potential is understood as a complex of intellectual and creative tools, interconnected within the framework of professional or creative activity and characterized by the individual's ability to develop new ideas and concepts based on his knowledge and information from the external environment. ^{iv}. At the same time, defining the essence of the term "creative potential", we emphasize that in the scientific literature the concept of "creativity" is inextricably linked with the concept of "creativity". Both concepts coincide with each other, often used as synonyms. The reason for this is the origin of the term "creativity" (from Latin Creatio - creation, from the English. Creativity - creativity, creativity. As you can see, the interpretation of the term traces the presence of an element of creativity.

Therefore, before the concept of "creativity" is interpreted, its components were studied as components of the concept of "creativity". In turn, the problems of creativity have long been studied by teachers, psychologists, philosophers, and others.

Philosophers interpret creativity as a process of human activity, which creates qualitatively new material and spiritual values. Types of creativity are determined by the nature of creative activity^v: inventive; organizational; scientific; artistic, etc.

In psychological literature, there are various approaches to the definition and interpretation of creativity. Creativity is seen as the creation of a new, the discovery of the unknown, as a productive form of human activity and independence. According to Altshuller G., creativity is an activity, on the basis of the reorganization of existing experience and the formation of new combinations of knowledge generates new. It manifests itself in two levels. One level of creativity is characterized by the use of existing knowledge and the expansion of their field of application on another — an entirely new approach is created that changes the familiar view of an object or field of knowledge. The essence of creativity as a psychological property lies in intellectual activity and sensitivity to by-products of activity. The leading idea of Altshuller G., which is of great importance in the aspect of our research, is installation, creativity, like any activity you can learn, in addition, everyone needs to be taught creative work ^{vi}. This opinion is shared by I. Lerner, who is convinced that creativity can be taught by following three directions. ^{vii}: intellectual operations training; training procedures for creative activities; the formation of a value attitude to creativity.

According to Ponomarev Y.A. personality is characterized by originality, initiative, high selforganization, considerable capacity for work. In turn, Winter I.A. drew attention to such personality traits as the depth of thoughts, the unusualness of the questions and solutions posed, and intellectual initiative. In studies by the Epiphany D., the unit for the study of creativity proposed to consider "intellectual initiative", and all types of creative activity, according to the author, are united by such an individual's ability as "intellectual activity". Torrance P. defined such a common feature of creative personalities as the need for development, continuous growth.

In pedagogy, creativity is analyzed in connection with the educational process and is defined as a conscious, active human activity aimed at cognizing and transforming reality, creating new original subjects and is expressed in the search for the most effective teaching and upbringing students, in the creation of teaching aids, continuous replenishment of knowledge, viewing outdated pedagogical views, decisions^{viii}.

According to A. Dunaev, the teacher's creativity provides a personality-oriented developing interaction between the subjects of the educational process (teacher and learner), which is due to the specifics of psychological and pedagogical relationships between them and is aimed at shaping the learner's personality and increasing the level of creative pedagogical activity of the teacher. The main criterion for the teacher's creativity, according to the author, is effectiveness - ensuring positive dynamics in the formation of the learner's personality and increasing the effectiveness of the teacher himself.

Alekseev N.A. defines a teacher's creative personality as a person who is characterized by a consciousness of creativity in professional work at the level of persuasion, focus on creativity, intellectual activity, which manifests itself in a combination of scientific and pedagogical thinking and creative imagination.

As noted above, recently in the scientific literature the term "creativity" has become widespread, which almost replaced the actively used phrase creative abilities. These concepts are perceived as synonymous, therefore there is some doubt about the appropriateness of introducing a new term. However, objectively, it is advisable to define creativity not as a kind of creative ability or a combination of them, but as a capacity for creativity. These concepts, although very close, but according to some authors are not identical

The founder of creativity research Gilford D. proved that the effectiveness of solving problems does not depend on the available knowledge and skills, which are measured by intellectual tests, but on the special ability to use the information presented to solve a problem in various ways and at a fast pace. This feature was called creativity.^{ix}

Guilford D. and Torrance E. identified 16 hypothetical intellectual abilities that characterize the creativity of thinking. Among them: speed (the number of ideas that arise over a certain time interval); flexibility (ability to navigate from one idea to another); originality (ability to produce ideas that differ from generally accepted ones);

curiosity (hypersensitivity to problems that are not of interest to others); logical independence of reactions from stimuli.

Then Guilford D. combined these abilities into the concept of "divergent thinking" - a type of thinking that occurs in different directions and allows varying solutions to the problem, leading to unexpected conclusions and results. Convergent thinking is aimed at analyzing all available methods for solving problems in order to choose only one correct one from them. Convergent thinking focuses on a previously known trivial solution to a problem; divergent thinking has a manifestation when the problem has yet to be determined, when there is no previously proposed, established way to solve it. Convergent thinking determines intelligence, divergent thinking determines creativity.

Epiphany D. also interpreted intelligence and creativity as two different common abilities, she connected their existence with information processing processes. Creativity is responsible for transforming the information available to a person and generating an infinite number of new models of the world. Intelligence - for the use of this information in real practice and adaptation to the outside world.

An exhaustive study of creativity and intelligence was carried out by Lubard T., Mushiru K., Torjan S., Zenasni F. They found that the result of solving a complex mental problem correlates with creativity, and the correctness of the solution positively correlates with the level of general intelligence. Therefore, creativity and general intelligence are abilities that determine the process of solving a mental problem, but at different stages they perform various tasks.

Bulda A. considers intelligence and creativity as a single human ability of a higher plan and characterizes this position as a reduction of creativity to intelligence. In this case, it is not that this is the only ability, but that creativity is a derivative of intelligence. Therefore, with high intelligence - high creative abilities are possible, and with low - manifestations of creativity are difficult. There is no need, believes L. Ermolaeva, to highlight creativity as a special ability. The ability of any type of activity (scientific, artistic) is primarily ensured by a high level of general intelligence.

In predicting the success of primary school, many researchers have come to the conclusion that learning exists as a general learning ability, independent of intelligence and creativity. It is

known that the correlations of creative abilities and performance are very small, and the personality traits of the "ideal student" and "creative person", according to empirical research, are polar. The correlations between the level of general intelligence and success in elementary school are very different and depend on the methods for diagnosing intelligence, the characteristics of the sample, etc. So, the correlation values for the formation of creative abilities obtained in studies depend on the diagnostic procedure. So, during the formation of creative abilities, it is necessary to take into account the presence of the manifestation of its criteria: the manifestation of creativity during testing indicates that the individual is creative, but the opposite is false. If we place tests on the level of regulation of human behavior in the process of diagnosis, we will get a scale at the opposite poles of which will be, on the one hand, high-speed intelligence tests, and on the other hand, game methods for diagnosing creativity.

At the same time, according to psychologists, creativity is the power of the human mind, creates new content by changing and creating new connections, and defined it as the ability to destroy the generally accepted, habitual order of ideas in the process of thinking. Torrance E. believed that creativity is not a special, but a general ability, which is based on the constellation of general intelligence, personal characteristics and abilities for productive thinking^x.

Currently, many researchers consider creativity in the following main aspects: as a process; as a product; as a person (in fact, creative abilities of a person); as an environment (sphere, structure, social context, forming the requirements for a product of creativity); as a problem to be solved.

Psychologists made the following generalizations regarding the essence of creativity: creativity is the ability to adaptively respond to the need for new approaches and new products and allows us to recognize new things in existence, although the process itself can be both conscious and unconscious; the creation of a new creative product depends primarily on the personality of the creator and the strength of his internal motivation; the specific properties of the creative process, product and personality are their originality, independence, validity, adequacy to the task and another property that can be called suitability - aesthetic, environmental, optimal form, correct and original at the moment; Creative products can be very different in nature: a new solution to a problem in mathematics, the discovery of a chemical process, the creation of music, paintings or poems, a unique solution to social problems, etc.

From the point of view of acmeology, creativity is defined as a process inherent in many personalities and a complex of intellectual and personal characteristics of an individual, contributes to the independent advancement of problems, the generation of a large number of original ideas and their solution to it.

Golovanova A., having analyzed various approaches to the study of creativity, made a generalization that creativity is studied in two main aspects - process and personality. The study of creativity in the procedural aspect includes the features of the transformation by the subject of the subject of creativity, objective reality as a whole, as well as the phases, stages, stages and results of such a transformation ^{xi}.

In turn, according to most authors, the formation of creative abilities of primary school students with methods of interactive methods and technology, which contributes from the main factors to increase the effectiveness of primary school. The use of interactive methods and technology in primary school today receives the status of one of the main activities (along with educational and scientific) and is a prerequisite for the development of primary school. The formation of

creative abilities is, first of all, a qualitative stage of self-development of a personality, a process of self-actualization of subjects of the educational process, which has become possible as a result of self-education, self-reflection. Therefore, for elementary schools engaged in innovative activities, the processes of self-organization in the pedagogical and learning environment are especially characteristic, this may be the emergence of stable structures (creative groups, associations) and the emergence of creative personalities capable of creating a "personality-new", irrespective of the previous public experience. At the same time, an integral part of innovative processes in the elementary grades is especially important.

Thus, an analysis of the scientific literature shows that there is no unambiguity in determining the essence and concept of creativity. Despite various views, in almost all definitions, creativity is associated with the creation of a new one (for the individual and for society). Most authors understand creativity as the ability of a person to perceive a problem using the optimal opportunities for this, to create a new, original product of social importance. In turn, the term creativity is interpreted as the conscious active activity of a person aimed at the reconstruction and transformation of certain phenomena of reality. At the same time, according to the basic psychological approaches, creativity and creativity should not be divided among themselves. According to Ilyin E., this gives rise to confusion, and ambiguous definitions, which should not be allowed in scientific approaches. Therefore, despite the fact that in life creativity and creativity can be divided, in science these concepts should be identical

In turn, according to most authors, the formation of creative abilities of primary school students is inextricably linked with innovative activity, which is the use of interactive methods and technology, which is considered as the main condition for the modernization of the educational process and is one of the main factors for increasing efficiency in the work of the school.

According to most researchers, the formation of creative abilities using interactive methods and technology in primary grades should comply with the following principles:

The integration of education, the differentiation and individualization of education, the democratization of education, pedagogical humanism, trust and respect for the individual, the desire and ability to feel the other as oneself, cooperation, the ability to listen to students, respect for the personal position.

The implementation of these principles requires a transition from normative to innovative, creative activity, which provides for a change in the nature of the educational system, content, methods, forms, technologies of training and education. The purpose of education in such conditions is the free development of individual abilities, motives, personal values of a diverse, creative personality.

The essence of pedagogical activity, according to Beknazarov A.A., lies in the unity of emotional, sensual and mental development, the education of the features of a real person. Zakirov A.A. this concept is interpreted more broadly: the professional activity of pedagogical personnel is a special type of social activity aimed at transferring the culture and experience accumulated by mankind from the older generations to the younger, creating the conditions for its personal development.

The activity of teaching staff from the perspective of a systematic approach is investigated by Tolipov U. Sayidakhmedov S.N. . In the interpretation of UK Tolipov, the professional activity

of the teaching staff is a complex organized system of various types of activities, where the leader is the activity of a teacher who directly teaches^{xii}.

The main meaning of the activities of teaching staff, according to the author, includes the performance of several functions, in particular, educational, educational, organizational and research. These functions are manifested in unity, although for many one of them dominates the others.

Given the specifics of teaching activities and approaches to the study of creativity, the creative potential of teaching staff can be considered in the following aspects ^{xiii}: activity aspect - professional activity of a teacher of a higher school in the formation of the creative potential of teaching staff in the course of their training and retraining; productive aspect; personal aspect; environmental aspect; problematic aspect.

One of the professionally important qualities of a teacher, the conditions for his success as a professional, is his desire for innovative pedagogical activity. This is motivated by the fact that innovative pedagogical achievements provide a new vision of the problems of education and upbringing, create new pedagogical technologies that provide the educational process with signs of non-standard and originality, and most importantly create a more optimal form of actualization of cognition, upbringing, and thinking. Therefore, the openness of future teachers to this achievement is an important component of the creative potential of teachers.

Creative potential is also formed by the teacher's awareness of the need to find new teaching methods and methods, avoiding stereotypes, as well as the requirements of society, and the goals of the educational process require flexibility in solving problems and a non-standard approach to teaching and upbringing.

At the same time, in primary school students it manifests itself in the ability to perceive and non-standard solve problems using the most optimal means, successfully interact with the environment, especially in non-standard situations, realized in the ability to create original products that have personal and social significance, in the ability to create new , in an unconventional approach to the organization of the educational process, the ability to creatively solve any problems, interact with students, colleagues, parents teach s, in the ability to develop the creativity of students, would be reflected in the behavior, which would become for them the norm of life.

In turn, the formation of creative abilities depends on such professional skills and attitudes of pedagogical personnel as: recognition of the value of creative and creative thinking of a person; free manipulation of objects and ideas; the ability to fully reveal the features of the creative process; the ability to develop constructive criticism; ability to promote self-esteem.

This determines the problems and content of personal training of students, focused on the search for new, innovative approaches to learning

However, according to Dorfman L.Ya. the formation of creative abilities in martyrs depends on the following features: divergence of thought; originality of thinking; ability to offer a new way to use an object; ability to generate a large number of ideas; ability to analyze; imagination; ability to detect and pose a problem; ability to find many associations; The pursuit of excellence; individualism; ability to overcome stereotypes; purposefulness; intuition; motivation; figurative memory; "Tenacity" of attention¹.

Druzhinin V.N. and Khazratov N.V. based on the analysis of the works of Guilford J., Torrance E., Bono E. and others. revealed twenty-eight personality factors of creativity - abilities and personality traits that influence the formation and development of creativity: divergence of thinking; originality of thinking; semantic flexibility; ability to detect and pose a problem; ability to generate a large number of ideas; ability to analyze; ability to overcome stereotypes; ability to find many associations; curiosity; The pursuit of excellence; ability to take risks; motivation; figurative memory; emotionality; spontaneity of behavior; purposefulness; the ability to heighten the perception of disharmony; self-confidence; individualism; attention; imagination; intuition; ability to fantasize; installation on a positive perception and application of innovations; autonomy and independence of judgment; insight; ability to consider phenomena and events from various points of view².

As a result of research Orlova T.S. biographies of nineteen prominent creative personalities (writers, artists, sculptors, composers and scientists) it was revealed that ^{xiv}: 95% of creative personalities had an early acquaintance (most often, under the age of 10 years) with the field of science or art, in which they subsequently achieved significant results; Rationing and development of the abilities of 53% of creative personalities for creative activity were significantly influenced by teachers; 68.4% of creative personalities showed creative abilities before the age of 15 years.

These results indicate that significant sociocultural factors in the development of personality creativity are, first of all, upbringing, education, as well as teachers who contribute to the early initiation of personality in the achievements of science and art, creating a favorable environment in the environment of the person that encourages creative activity.

According to Orlova TS, the fundamental predicates of creativity that determine its socioontological foundations are the general and specific values of human life. Common values include: social justice; piety; humanity; goodwill; conscientiousness; patriotism, etc.

The specific (economized) foundations of creativity include: benefit; utility; efficiency; rationality; profitability; utility; pragmatism.

According to Ryndak V.G. and others. the creative potential of teaching staff should be characterized by: developed creative imagination; sustainable knowledge system; the ability to purposefully generate new non-standard ideas; psychological and pedagogical knowledge about the development and implementation of innovative processes in the education system; the presence of special psychological and pedagogical methods, techniques and means, the use of which allows you to actively engage in innovative pedagogical activity.

Ponomareva Ya.A., according to the results of the research, identified the following groups of properties characteristic of a creative person: perceptual (associated with the perception of information); intellectual; characterological.

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According to Sternberg R. and Grigorenko E., a creative person possesses a wide range of interests and hobbies, dreaminess, sensitivity, sensitivity, a rich inner world, aesthetic receptivity, non-conformism, courage, naturalness, spontaneity, emotionality, as well as the ability to take reasonable risks, willingness to overcome obstacles, resist the opinions of others.

The results of the study of Epiphany D. and others showed that creative people are characterized by great variability in the combination of personality traits. One thing in common was emotional lability. Creative people stand out for their individuality: they are original, with a rich inner world, prone to abstract, unconventional thinking.

According to Morozov A.V. creativity, as an integrated property of a teacher's personality, is characterized by the following features: search-transformative style of thinking; developed intellectual and logical abilities; vision of a problem; creative imagination, developed imagination; specific personality traits; specific motives; communication skills; ability to self-government; high level of general culture.

Thus, the analysis of the concept of creative abilities in students of the components of creative abilities allows us to conditionally distinguish the following components of creative abilities.

motivational; problem-sensitive; informational; mental self-sufficient; communicative; analytical; constructive; innovative.

This approach allows you to take into account the features of primary school students and to identify the relationship of the learning system with the present. Macroenvironment factors (political, sociocultural situation), as well as microenvironment factors (type of educational institution, environment in the teaching staff, economic situation of subjects of education) determine the presence and range of those problems that need to be creatively solved during the pedagogical process in primary school. Environmental factors affect the personality, its creative and cognitive development, and therefore affect the product itself, the means and possibilities of its implementation. In turn, the process of manifestation of creativity is determine the properties of this product, which the individual aspires to.

So, the motivational component of creative abilities characterizes the student's conscious attitude to problems and solving actual problems. At the lesson, the student's creativity can be caused by various motives (increasing the effectiveness of the educational process, trying to attract attention, gain recognition (need for self-actualization, etc.). Positive motivation (attitude) to creativity, openness of achievement are important qualities of the student, since only adequate motivation ensures effective activity and self-disclosure of the personality of the student as well.

The component of the motivational component are:

- manifestation in the recognition of universal and creative values, observance of ethical behavior, expressed in recognition and promotion of these values among students, an attempt to act as a model of moral and creative behavior, empathy - the ability to understand the emotional state of another person;

- weakening the reaction to a negative factor, the ability to understand other points of view, tolerance of the positions of other people, lifestyle, recognition of the right of others to be different;

- the emergence of attractiveness between people during personal perception;

- the attitude to the trainees as a subject of equal interaction, the desire to act disinterestedly for the benefit of others, often to the detriment of their own needs or interests.

The problem-sensitive component contains the following components:

- the use of socially significant material, since the resulting product of educational activities must have social demand, this will create additional motivation for students;

- encouraging interest in gaining knowledge in various fields, since the breadth of knowledge, the ability to look beyond the boundaries of a particular industry, is a source of new, original solutions;

- the teacher's understanding of interpersonal relations in the teaching staff and outside it, in addition to understanding the personal motivations and attitudes of the students) stimulating and creating a creative environment (stimulating the avoidance of group pressure, preventing envy, supporting and encouraging humor, understanding the "funny" - the ability to appreciate the imposition of certain qualities an object to others, an understanding of metaphors, analogies, a sense of the specificity of language and speech, the ability to transform into other images and developed imagination);

- a strategy for solving a problem, which consists in analyzing the problem and not criticizing the person, interpreting errors as an unproductive solution strategy or individual constructive search, training without stress, anxiety and fear of punishment, which create a free, creative atmosphere in the training team and encourage free play and experiment, the creation of an equal "subject-subject" interaction between the teacher and the students and between the students themselves).

The components of the information component include:

- knowledge of personality theory helps in understanding the psychology of personality, mechanisms and patterns of memory, attention, characteristics of thinking, psychological factors and characteristics of the personality behavior of the learner, etc .;

- a conscious pedagogical position reflects the teacher's professional knowledge, the general knowledge system characterizes the degree of erudition of a teacher from various scientific disciplines, and the possession of innovative teaching and upbringing technologies allows expanding pedagogical activity taking into account modern pedagogical achievements with the aim of using them and creating their own, original technologies, techniques and receptions;

- knowledge of the theory of creativity - contains such elements as: knowledge of the theory and history of the study of creativity, information on the ways of developing creativity, familiarization with diagnostic methods for determining the level of creativity.

The thought component is characterized by:

- the ability to solve arithmetic problems;
- the ability to solve logical problems;

- rationality;

- the ability to find associations;

- curiosity.

The self-contained component includes the following elements:

- originality (non-standard answers);

- semantic and adaptive flexibility (determination of the properties of an object and application in other conditions);

- speed of producing ideas;

- development and improvement of the facility.

The communicative component is the ability to use the teacher various mechanisms for the development of interpersonal relationships of students in the learning process thanks to verbal and non-verbal communication skills, apply acting techniques, prevent and overcome stereotypes, barriers in resolving conflicts and pedagogical problems, productive use of the game and experiment. The analytical component contains such a component as perceptiveness and problem awareness, observation, concentration of attention, concentration, dedication, selectivity to the problem, non-conformism in behavior. The creative process requires high discipline, dedication and focus. The problem should be in the spotlight for a long time, albeit with different intensities. Concentration and selectivity necessary for the collection, analysis and evaluation of accumulated knowledge and information and their processing. Pedagogical perception - perception, study, understanding, assessment by the teacher of the state of the subjects of learning and himself, "reading" the internal state by external manifestations, "reading" by the face, poses, gestures.

The next component is constructive, which contains elements such as:

- sensitivity of students to environmental stimuli, attitude to risk (contributes to the emergence of distant associations)

- awareness of the meaning and goals of educational activities in the context of the development of creativity of students;

- abstracting from the problem;

- self-confidence.

Components of an innovative component:

- scientific and practical creative experience;

- a positive assessment of the ideas of the trainees;
- interpretation of trainees' errors as an individual constructive search;
- a new formulation of educational goals;
- An adequate assessment of the creativity of students.

Thus, the analysis of the formation of creative abilities allows us to conditionally distinguish the following components: motivational; problem-sensitive; informational; mental self-sufficient; communicative; analytical; constructive; innovative.

REFERENCES

ⁱAminov N.A. Education management models and teaching styles // Psychology Issues. - 1994. - No. 2. - P. 88-99.

ⁱⁱMaslow A.G. Motivation and personality. - St. Petersburg, 1999, -78p. Maslow A.G. Selfactualization // Psychology of personality: Texts. –M.:, 1982. –p. 108-118.

ⁱⁱⁱ Asadov Yu.M. The individual psychological characteristics of teachers as factors in the development of professionalism: Author. dis. ... cand. psychol. sciences. - Tashkent: "NUUz", 2007. - 25 p.

^{iv}Abdurakhmanova R.B. The formation of the professional orientation of teachers and psychologists: Author. dis. ... cand. psychol. sciences. - Tashkent: "NUUz", 2005. - 26 p.

^v Andreev A.A. Soldatkin V.I. Applied philosophy of open education: pedagogical aspect. // M .: RIC Alfa MGPOU,
2002. -168p. Dewey J. Reconstruction in Philosophy / Per. from English M. Zanadvorova, M. Shikova. M .: Lgos,
2001, -168s.

^{vi}Altshuller G.S. How to become a genius: the life strategy of a creative person / G. S. Altshuller, N. M. Vertny. -Minsk: Belarus, 1994 .-- 479 p.

^{vii}Lerner I.Ya. Didactic foundations of teaching methods. –M .: 1989. -311p.

^{viii}Bogdanova I.M. Pedagogical Innovation: A Training Manual. - M .: "TPP", 2000. - 96 p.

^{ix} Guildford J. Three sides of intelligence / J. Guildford // psychology of thinking in 2 volumes / under the general ed. A.M. Matyushkina. –M.: Enlightenment, 1965. –T1. S. 443-456 p.

^x Torrance E.P. / Developing creative thinking through school experience // -N.V., 1962. –c. 215

^{xi} Golovanova A.A. Some approaches to the analysis of creativity of pedagogical communication // Questions of practical psychology. Vol. 11. - Saratov: SSU, 1996 P. 61.

^{хії} Толипов Ў.Қ., Сайидаҳмедов С.Н. Педагогик маҳоратва педагогик технологиялар. –Т. "Фан ва технология", 2014.-Б.335.

xiii Fable Robert. Tips for teachers, beginners .: Pract. allowance. - K., 2005 .-- 448 p. Batarshev A.V. Diagnostics of professionally important qualities / Batarshev A.V., Alekseeva I. Yu., Mayorova E.V. - St. Petersburg. : Peter, 2007 .-- 192p.

^{xiv} Orlova T.S. Creativity of economic consciousness. Monograph. Yekaterinburg: Publishing House Ural.un-ta, 2004 .- P. 79.