

**METHODOLOGICAL ASPECTS OF STUDENTS' CREATIVITY  
DEVELOPMENT FOR THE SUBJECT OF "PHOTOGRAPHY"**

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**ABSTRACT**

*The analysis of the judgments of scientists-psychologists and teachers in the research of creativity is presented. A general approach is revealed in the formation and development of innovative and creative abilities among students of a technical higher educational institution (HEI). This article discusses that the successful mastering of the subject "Photography" as an activity that effectively contributes to the development of creativity of future bachelors of technical education.*

**KEYWORDS:** *Creativity, Creative Work, Photography, Thinking, Student, Intellectual Ability, Personality.*

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**INTRODUCTION**

The problems of creativity and innovation have been the objects of research of many psychologists and educators. Despite the huge number of definitions of creativity, there is still no consensus on what creativity is. Most scientists believe that "creativity" includes divergent and convergent thinking.

The first who started research in this area was the American psychologist Joy Paul Guilford.[1]. In 1959, he introduced the term "creativity", thereby giving the concept of it as a special kind of divergent thinking.

In his research, J. Gilford distinguished between divergent thinking and convergent thinking, which consists of the mental search for a solution to a given problem, which is carried out in different directions of the semantic space, depending on the content of the problem.

S. Mednik [2] in his studies suggested the presence of both convergent and divergent components of creativity in the process of artistic work.

According to the scientist, the process of solving a problem will be more creative if the elements of the problem are taken from other areas of the issue under consideration, and he also believed that the difference between a creative solution and a stereotypical one is determined by the ability to overcome stereotypes of thinking and a wide range of associations.

Thus, he believes that creativity implies, along with divergent and convergent thinking. Modern trends in technical higher education dictate increased requirements for graduates. Along with professional knowledge, among graduates, such qualities as non-standard approaches to solving social and professional problems are in demand.

Non-standard decisions cannot be made without appropriate training, which includes the formation and development of a student of a technical higher educational institution (HEI) both creative and artistic abilities.

Analyzing the definitions of the creativity of foreign scientists-researchers, we can conclude that they have not come to a unanimous consensus, but many agree on the following four aspects of

creativity:

- Creative process;
- Creative product;
- Creative personality;
- Creative environment (sphere, structure, social context that forms the requirements for the product of creativity).

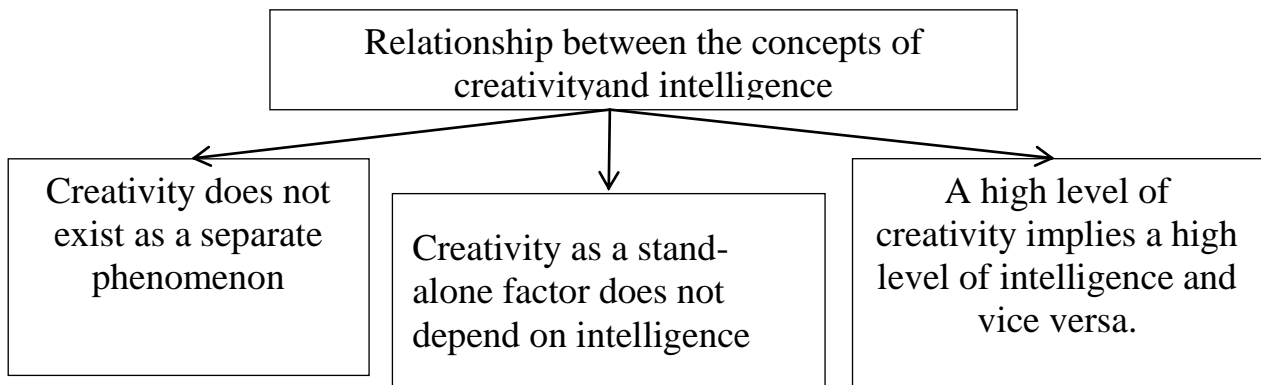
The definition of creativity is not static, but rather, it is dynamic. Each study adds more and more nuances to this definition, whereas creativity is mainly seen as:

- Ability to be creative;
- Intellectual creativity;
- Something new, original;
- Distant associations;
- Restructuring of an integral system;
- Unusual coding of information;
- Divergent thinking;
- Result (or absence) of intrapersonal conflicts;
- Going beyond the redistribution of already existing knowledge;
- Unconventional thinking that allows you to quickly resolve a problem situation, etc.

We shall note, that a close relationship is indicated between creativity and the level of intelligence in the works devoted to the study of creativity. So D. Bogoyavlenskaya believes that “creativity is the highest form of intellectual activity, the most important quality characteristic, which is intellectual initiative.

She considers creativity as a situational - not stimulated activity, which manifests itself in the quest to go beyond a given problem, as well as creativity is characteristic of all innovators, regardless of the type of their activity. The system-forming factor of creativity, in her opinion, is intellectual activity, which she understands as an integral formation, a property of an integral personality, reflecting the procedural interaction of intellectual and motivational components of the system in their holistic manner and ensures the individual’s capacity to situationally not stimulated productive activity”[3].

However, it became necessary to differentiate them and create separate methods for diagnosing intellectual giftedness and creative giftedness and productivity since the dependence of these indicators was not identified in all cases. This latter concept is called the creativity quotient (CQ).



**Fig.1. the main approaches to the relationship between the concepts of creativity and intelligence**

From the main approaches presented in Figure 1.1, the relationship between the concepts of creativity and intelligence follows:

- 1) Creativity does not exist as a separate phenomenon. The necessary conditions for the creative activity of a person are, first of all, motivation, values, personality traits (A.A. Olokh, A. Maslow and others), as well as intellectual giftedness. The main characteristics of a creative personality are cognitive giftedness, sensitivity to problems, independence in uncertain and complex situations.
- 2) Creativity as a stand-alone factor does not depend on intelligence (J. Guilford, K. Taylor, Ya.A. Ponomarev). That is, there is an insignificant correlation between the level of intelligence and the level of creativity.
- 3) a high level of creativity implies a high level of intelligence and vice versa. There is no creative process as a specific form of mental activity. This theory is adhered to by almost all specialists in the field of intelligence (G.Yu. Aysenk, R. Sternberg and others);

We believe that further research should be carried out adhering to the theory put forward by J. Guildford, K. Taylor and Ya.A. Ponomarev, considering creativity as a stand-alone factor independent of intelligence, with an insignificant correlation between the level of intelligence and the level of creativity;

### **FORMULATION OF THE PROBLEM**

A feature of the development of creativity at the student age is the formation of “specialized” creativity: the ability to create, associated with the professional sphere of human activity.[4]. The organization of the educational and creativity process plays an important role during this period. We believe that mastering a certain specialty should take place not in the educational process, but in the educational and creativity process. Such an organization of training will allow the student to fully reveal his creative potential. Student age falls at the beginning of a period characterized by individualization, which “is associated with the development of their own special worldview, with the establishment of true authorship in the identification and implementation of their own lifestyle”.

Studentship is characterized by cognition of new information areas and the deepening of intellection in certain areas, the development of methods of reproductive and creative activity, which give positive motivation for the formation of students’ cognitive interest in professional activity.

The age characteristics of a student are: self-affirmation of personality, self-awareness, a variety of valuable life experience; relative formation of value orientations, formed by the worldview. The

development of students' and young professionals' creativity requires an appeal to their personality.

Many psychologists and teachers including Russian researchers: V.I. Andreev, S.I. Arkhangelsky, A.G. Asmolov, D.B. Bogoyavlenskaya, A.V. Brushlinsky, S.L. Vygostkiy, A.N. Leontiev, A.M. Matyushkin, Ya.A. Ponomarev, Rubinstein dealt with this issue.

E.S.Gromov and V.A. Molyako differentiate seven signs of students' creativity: originality, heuristic, fantasy, activity, concentration, clarity, sensitivity. [5]. A creative specialist must have the following qualities: resourcefulness, self-criticism and criticality, flexibility of thinking, independence of opinion, courage and virtue, energy, perseverance and persistence in bringing the matter to the end, purposefulness.

Avicenna in his treatise "Tadbiru Manozil" defined creative thinking as "a special type of mental activity that allows a person to make a sound judgment about the proposed point of view or behavior model". Avicenna's definition emphasizes the role of creative thinking in solving issues and problems of mental education. [6].

The great mathematician and astronomer, geographer, encyclopedic scientist, a native of Khwarizmi Abu Abdulloh Muhammad ibn Muso al-Khwarizmi, in the Middle Ages, believed that it was necessary to replace the traditional "cumulative" education - in which the heads of students serve as a kind of "counting" - for "problem-posed" education, when students deal with real life problems. The scientist believed that teaching would be much more successful if students formulated problems, including economic, social and political problems based on their own life experience and then solved them, using all the possibilities that the teacher presented to them. Khwarizmi paid great attention to the issues of personal suppression. He argued that well-organized education capable free students from this suppression, therefore his educational concept can be called the concept of a free-thinking person. In the studies of a number of scientists, the main characteristics of creativity are called the ability to put forward new, unexpected ideas that differ from the widely known, generally accepted, commonplace ones, as well as the ability of students to offer a large number of original ideas in a small period of time.

However, situations with elements of problematic and feasible difficulty are needed for creativity.

As S.L. Rubinstein writes: "Thinking always begins with a problem or a question, with surprise or bewilderment, with a contradiction". In his opinion, the process of thinking is always aimed at solving a specific problem. [7].

After Uzbekistan gained its independence, S. F. Abdullaev, A. A. Amanullaev, B. Baymetov, S.S. Bulatov, Zh.A. Darmenov, U.N. Nurtayev, A.P. Sulaimonov, N.Kh. Tolipov, R.Z. Khayrov, R. Khasanov[8, 9, 10, 11, 12] and other scientists have carried out important research on the methodology of teaching fine and applied arts.

Based on our analysis of the main approaches to the development of students' creativity, it can be concluded that there is a relationship between personal characteristics and the manifestation of a creative attitude to the performed professional activity. The personal side requires an appeal to the personality of the creator, its value orientations, and ways of interacting with others.

Modern educational programs are designed to develop creative thinking, however, in practice, the development and improvement of these skills is not fully developed. One of the important and effective means of developing a person's creativity, in our opinion, should be considered artistic photography.

In modern conditions of human development, photography as a type of "technized" activity acquires signs of psychologically corrective, cognitive, educational, developmental, creative activity, it is considered an important form of socialization, creative self-expression, self-

knowledge and self-realization of the individual. Therefore, the relevance of the creatively activating potential of photography, especially photography, which is called art photography, is becoming more and more obvious.

Art photography influences the personality, improving it, the personality satisfies in this type of visual art a wide range of important needs, maintains a certain emotional stability.

The photography contains excellent non-verbal and indirectly verbal ways of expressing a person's attitude to objects and phenomena of reality in the form of symbols, associative comparisons, and artistic images.

Photography as one of the genres of creative art requires from a person not only the ability to perfectly master photographic tricks and techniques, but also an original vision of his own creative perception of the world.

Psychology plays no less role in photography than technical equipment. Without creativity and the ability to improvise, it is impossible to create your own photographic style that will gain public recognition. The psychological qualities of the photographer and his artistic talent make it possible to embody a certain creative idea in reality and thus get vivid and memorable pictures.

Why are psychological aspects, emotions and mood of a person so important in photography? The thing is that formation of the photographer's personality occur at the same time with the process of taking photographs.

Almost any photographer usually starts with simple family sketches, photographs of friends or acquaintances, as well as holidays or beautiful places that he has visited. Looking at these pictures, he soon realizes that it is necessary to improve the quality of photographs and purchase a more modern and functional camera. Then there are experiments with the semantic content of the pictures, he learns from his own experience to build compositions, work with light, perspective, shape and color. Having perfectly mastered the principles of artistic composition and the technical side of photography, he still notices that his pictures remain not bright, boring and not interesting. And here every photographer must understand that his main task is not to simply document the world around him, but to express certain emotions and feelings through photography. The unusual perception of the photographer, in harmony with technical knowledge, allows to create truly vivid and bright images that will evoke genuine emotions by viewers. Thanks to his vision of the changing world and personal experiences, the photographer develops his own style, and his works invariably acquire inimitable and unique features. Thus, a certain invisible connection arises between the photograph and its author. Therefore, any photographer must possess not only assiduity, patience and persistence, but, above all, creative abilities. He should always carry new ideas with him, have a fresh look at the reality around us and the desire to embody it in his artistic work. If a photographer shoots ordinary scenes that do not arouse interest in the viewer and do not generate emotional experiences in it, consequently his work will quickly be forgotten and lost among others.

Involvement in artistic photography not only increases the range of visual impressions and creative possibilities of the individual, but also qualitatively enriches the structure of visual and aesthetic perception and creative imagination, giving certain opportunities for one's own comprehension and affection of some scene subject or object. This, in turn, allows everyone to be not a passive consumer of visual impressions, but also a subject capable of adequately perceiving and evaluating the artistic-figurative essence of the environment, realizing ideas, associations and feelings of independent creative works

The relationship between the above identified components of creativity and the content (theme) of the discipline "Photography" is presented in table 1.1.

**TABLE 1.1 CONNECTIONS OF THE COMPONENTS OF CREATIVITY IN THE CLASSES FOR THE DISCIPLINE “PHOTOGRAPHY”**

Lectures	Practical work	Independent work
<b>Unit 1</b>		
<p><b>motivational:</b> increases interest in photography, profession, study</p> <p><b>action:</b> the formation of practical skills;</p>	<p><b>action:</b> the formation of practical skills;</p> <p><b>cognitive:</b> applying knowledge and skills in practice</p>	<p><b>cognitive:</b> search and assimilation of new knowledge;</p> <p><b>motivational:</b> increases interest in professional photography and the acquisition of new knowledge</p>
<b>Unit 2</b>		
<p><b>motivational:</b> increases interest in professional photography and the acquisition of new knowledge</p> <p><b>action:</b> the formation of practical skills;</p>	<p><b>action:</b> the formation of practical and professional skills;</p> <p><b>cognitive:</b> applying knowledge and skills in practice</p> <p><b>sensitive:</b> understanding the problem and looking for a solution;</p> <p><b>adaptive:</b> creative adaptation to professional conditions</p>	<p><b>motivational:</b> increases interest in professional photography and the acquisition of new knowledge</p> <p><b>cognitive:</b> search and assimilation of new knowledge</p> <p><b>sensitive:</b> understanding the problem and looking for a solution;</p> <p><b>adaptive:</b> creative adaptation to professional conditions</p>

Throughout the research, the connection between the components of creativity and the content (theme) of the discipline “Photography” was systematized; it was possible to establish that the mechanisms for the development of students’ creativity were not sufficiently involved in Unit 1 of the discipline.

Complex study of scientific aspects is necessary for the development of special skills such as psychophysiological, pedagogical, and methodological. Further in the research, we should search for effective methods of enhancing students’ creative activity at technical universities by means of artistic photography for the disciplines “Photography”.

**SOLUTION**

Creative thinking of a student of a technical university, as the intellectual activity of an individual is manifested in constructive activity in the aggregate of abilities and skills to generate new non-standard ideas, to choose productive ways of converting and transforming the original object when

solving cognitive tasks, which determines the development of the student's discursive and creative abilities in the interpretation and understanding, narration (description), decoding (subject recognition of perceived information based on analysis and synthesis), deverbalsation (extracting information from language means during translation) and explication (clarification) of professionally significant information.

A cognitive task as a pedagogical phenomenon that carries the knowledge that possesses the deciding one and which require refinement is the leading pedagogical means of developing a student's creative thinking.

The discipline "Photography" covers the technical and creative knowledge of the principles of photography. It examines the issues of working with digital technologies, the use of pictorial means in various genres of photography. Photography influences human thinking, sensory perception of reality, motivates to creative activity in order to see new facets of creative possibilities in their own works. This is especially determined in conditions requiring non-standard solutions.

Awareness of the principles of photography technology gives students the necessary knowledge to implement in various fields and spheres of activity.

Analysis of the published works of the studied literature on the problem of the development of creativity among students in the artistic and applied direction allows us to conditionally single out motivational, cognitive, active, adaptive, sensitive features as components of the student's creative potential, which allows us to adjust the educational process of artistic and applied disciplines, in particular "Photography" and determine the relationship between the content of training with the formed components of creativity.

The analysis of the Table 1. Shows that the components of creativity are not sufficiently involved in the first technical block of the discipline, in order to use the other important components, it is necessary to update the information, for example, add interactive methods, such as: Case studies, Sink wine, SWOT - analysis, FSMU, SCAMPER, PMI.

The structure of the abilities for artistic creativity covers the motivational sphere with a whole block of knowing abilities, whereas the cognitive and activity sphere is the ability to achieve the goal, the integration of cognitive, motivational and activity capabilities is a generalized characteristic of the integral universal personality of a novice photographer with formed personal and professional qualities.

The adaptive ability forms a creative adaptation to professional conditions, the sensitivity develops the ability to understand the problem and search for its solution.

Consequently, it is possible to develop the student's creative potential using the sensitive and adaptive components of creativity. The degree of manifestation of these qualitative sides contributes to the successful implementation of creative activity.

## **CONCLUSION**

Based on our analysis of the main approaches to the development of students' creativity, it can be concluded that there is a relationship between personal characteristics and the manifestation of a creative attitude to the performed professional activity. The personal aspect requires an appeal to the personality of the creator, its value orientations, ways of interacting with others.

In conclusion, proceeding from the analysis of our research, we can conclude that the discipline "Photography" contributes to an increase in the creativity of future bachelors of technical education, as it improves the ability to transformative activities based on the needs for self-realization, knowledge in the professional field, that is characterized by the ability to quickly

generate non-standard and functionally applicable ideas for achieving a creative result in future professional activities.

Successful mastering of the discipline “Photography” is seen as an activity that effectively contributes to the development of creativity. It integrates internal (developed perception, observation, creative imagination, visual-figurative thinking, emotional-figurative sphere) and external factors (information-enriched environment, cultural means of creative imagination) that positively affect the development of students’ creative activity.

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