

The Significance Of Research Powers Of Talented Students In Higher Educational Institutions

KurbanovaGullolaBakhramovna

Senior Lecturer, Department of Pedagogy and Psychology, Gulistan State University, Uzbekistan.

E-mail: kurbanova.gullola@mail.ru

Gulistan State University, Syrdarya, 120100, Gulistan city, 4-micro region (Uzbekistan) E-mail: glu_info@edu.uz

ABSTRACT

Identification of talented students in our republic and development of social and pedagogical technologies of their trainings. The regulatory framework for ensuring State and non-state cooperation in the field of education and the development of talented students has been created. The Presidential schools were created with the aim of deepening the disciplines, improving the effectiveness of teaching and developing high school students. Their material and technical base was provided. In the strategy of further development of the Republic of Uzbekistan, the priority task was defined as "to raise a generation of highly educated and intellectually developed people, to create a reserve of scientific and pedagogical personnel with competencies in higher educational institutions". As a result, the identification of talented students will allow them to enter the world of science, using a wide range of technologies to improve the competence of researchers based on innovative approaches.

KEYWORDS innovative approach, research competence, educational environment, talented students, social and pedagogical technologies, science, intellectually developed generation.

Article Received: 10 August 2020, Revised: 25 October 2020, Accepted: 18 November 2020

Introduction

Modern education at all levels has one main goal in practice: to give people knowledge about themselves and the world around them, to teach them to live using this knowledge for the benefit of themselves and society, to contribute to the realization of personal potential in their chosen professions. Based on this, education is not a goal, but a tool needed to achieve more important, strategic goals in life.

Higher education plays an important role in modern society. The intellectual potential of any state is created by its educational system, which is the main and integral factor in the sustainable and progressive development of the state. The quality of education of citizens determines the level of economic development and the standard of living of society, technology and modern market requires higher education.

In turn, the dynamic changes in the mechanisms of higher education are the result of ongoing reforms in the life of our country and new requirements for all spheres of public life. This, in turn, raises the problem of organizing educational activities on the basis of a systematic, integrated approach to the training of specialists. The complexity of achieving this goal requires not only a reproductive mastery of the learning material, but also a creative approach by both the

student and the teacher. Therefore, it is necessary to pay great attention to the formation of their creative potential in the process of training and retraining of future teachers as those with modern knowledge.

An analysis of the scientific literature shows that today the term "creativity" does not have a single scientific definition and interpretation that embodies in the minds of people all the valuable creative and intellectual components of the human personality, allowing it to be called creative. Given the existing priorities, some authors give more practical meaning to the term, given that creative potential can be developed in a purposeful way. Abraham Maslow, the founder of humanistic psychology, defines creativity as a fundamental feature of human nature, the potential bestowed on every human being from birth, as well as a special way of perceiving the world or interacting with reality. Based on this definition, creativity can be described as the ability or skill to see and perceive things and events around you in a new, unique perspective.

According to Y. M. Asadov, the most valuable feature of creative potential is its high role in the field of innovation. Innovation is the most systematic and visible result of the use of creative potential, primarily as an intellectual series that is the product of human intellect. Accordingly, it is innovation that has the

greatest impact on the development of scientific and technological progress.

Abdurakhmanov R. B. understands creative potential as a set of mental and creative tools that are interconnected in the context of professional or creative activity and are characterized by an individual's ability to develop new ideas and concepts based on knowledge and information from the external environment. At the same time, defining the essence of the term "creative potential", we emphasize that the concept of "creative" in the scientific literature is inextricably linked with the concept of "creation". Both are synonymous with each other and are often used interchangeably. The reason for this is the origin of the term "creative" (from the Latin *Creatio* is creation). Therefore, before the concept of "creation" was introduced, its components were studied as components of the concept of "creation". In turn, creative problems have been studied for a long time by teachers, psychologists, philosophers and others.

Philosophers interpret creation as a process of human activity that creates qualitatively new material and spiritual values. Types of creativity are determined by the nature of creative activity:

- invention;
- management;
- scientific;
- art, etc.

There are different approaches to the identification and interpretation of creativity in the psychological literature. Creation is seen as the creation of a new, unknown discovery as a productive form of human activity and independence. According to G. Altshuller, creativity is an activity that generates new knowledge based on the reorganization of existing experience and the formation of new knowledge combinations. It manifests on two levels. One level of creativity is characterized by the use of existing knowledge, while the other is characterized by an expansion of its scope — the creation of an entirely new approach that changes the usual appearance of an object or field of knowledge. The essence of creativity as a psychological trait is sensitivity to intellectual activity and the products of activity. The main idea of G. Altshuller, who is of great importance in the aspect of our study, is to establish creativity, as well as to learn any activity, in addition to teaching all creative activities. This idea was supported by I. Lerner. He believes that the three directions of creation can be taught by:

- training in mental operations;
- teaching in the mode of creative activity;
- formation of attitude to creativity.

According to opinion of Ponomarev Y. A., a person is characterized by originality, initiative, high self-organization and balanced performance. In turn, I. A. Zimnyaya focused on features such as depth of thought, unusual questions and solutions, and intellectual initiative. According to the studies of D. Bogoyavlenskaya the unity of creative research suggests the consideration of 'intellectual initiative', and in the author's view, all types of creative activity are combined with an individual's ability, such as 'intellectual activity'. P. Torrans defined such a common feature of creative individuals as the need for development, constant growth.

In pedagogy, creativity is analyzed in relation to the educational process and is defined as a conscious, active human activity to learn and change the truth, to create new unique topics, to search for the most effective ways of teaching and educating students, to create textbooks, to constantly update knowledge, rethink outdated pedagogical views.

According to A. Dunaev, the creativity of the teacher stems from the specificity of the psychological-pedagogical relationship between them and provides a person-centered interaction of subjects of the educational process (teacher and student) aimed at shaping the student's personality and enhancing the level of creative pedagogical activity of the teacher. According to the author, the main criterion of teacher creativity is to ensure the positive dynamics of the formation of the student's personality and increase the effectiveness of the teacher's own activities.

N. A. Alekseev defines a teacher's creative personality as a person characterized by a combination of scientific and pedagogical thinking and creative imagination, a person distinguished by an understanding of creativity in professional work that focuses on intellectual activity. As noted above, the term "creativity" has recently been widely used in the scientific literature and has almost replaced the phrase "creative abilities" that is actively used. These concepts are considered synonymous, so there is doubt about the appropriateness of introducing a new term. However, objectively, it is recommended to define creativity as the ability to create, not as a specific creative ability or collection. These concepts, although very close, are not the same according to some authors. D. Gilford, founder of the study of creativity, proved that the effectiveness of problem solving depends not on existing knowledge and skills measured by intellectual tests, but on the ability to use the information provided to solve a problem in different ways and quickly. This feature is called creativity.

D. Gilford and E. Torrans identified 16 intellectual abilities that characterize defined creative thinking. Among them:

- speed (number of ideas that occur in a certain period of time);
- flexibility (ability to move from one idea to another);
- specificity (ability to produce ideas that differ from the generally accepted);
- curiosity (increased sensitivity to problems that do not interest others);
- logical independence of reaction from motivation

. In addition, D. Gilford combined these abilities into the concept of “divergent thinking,” that is, a type of thinking that occurs in different directions and allows for different ways of solving a problem, leading to unexpected conclusions and results. Convergent thinking focuses on analyzing all the available ways to solve problems, choosing only one of them correctly. Convergent thinking focuses on a predetermined solution to a problem, while divergent thinking focuses on a problem that has not yet been identified, unless there is a pre-proposed, defined way to solve it. Convergent thinking defines the mind, divergent thinking defines creativity.

Researcher A. Bulda considers intelligence and creativity as human abilities that play an important role, and from this point of view, creativity is seen as an indicator of a reductive state relative to intelligence. In this case, creativity is an event that comes from the intellect, but not the only ability. Therefore, high intelligence produces high creative abilities, while with low level of intelligence it is difficult to show creativity. According to L. Ermolaeva, there is no need to separate creativity as a distinct special ability. Any ability to act (scientific, creative) arises primarily through a high level of general intelligence.

D. Bogoyavlenskaya also interpreted intelligence and creativity as two different common abilities, which he linked their existence to information processing processes. Creativity is responsible for changing the information available to man and creating an infinite number of new models of the world. Intelligence, on the other hand, serves to apply this information in real practice and to adapt it to the world around us.

T. Lubard, K. Mushiru, S. Torjan, F. Zenasni conducted a thorough study of creativity and intelligence, which found that the result of solving complex mental problems is related to creativity, and that the correctness of the solution is positively related to the level of general intelligence. Creativity and common sense are therefore the ability to define the

process of solving a mental problem, but they perform different tasks at different stages.

In predicting the success of higher education, many researchers have concluded that there is the ability to learn as a general ability to learn independently of reason and creativity. It is well known that the interrelationship between creativity and university self-esteem is so small that, according to empirical research, the personal qualities of the ‘ideal excellent student’ and the ‘creative person’ are different. The correlations between the overall intelligence and the level of university success are largely different, and the intelligence depends on the characteristics of the selected sample and the diagnostic methodology of the others. Thus, the correlation values of creativity and intelligence obtained in the studies depend on the diagnostic process.

Hence, it is necessary to be aware of the appearance of its criteria during the diagnosis of creativity: the demonstration of creativity in the test process shows the creativity of the individual, but the opposite is wrong. If we place tests on the level of regulation of human behavior in the diagnostic process, on the one hand, high-speed intelligence tests, which stand on opposite poles, and on the other hand, game modes for creativity. However, psychologists believe that creativity is the power of the human mind to create new content by changing and creating new connections, and defined it as the ability to destroy the generally accepted, usual order of ideas in the process of thinking. E. Torrans says that creativity is a general rather than a specific ability based on general intelligence, personal characteristics, and the ability to think effectively.

Many researchers today consider creativity in the following main aspects:

- as a process;
- as a product;
- as a person (actually a person's creative abilities);
- as an environment (industry, structure, social context, the formation of requirements for the product of creativity);
- as a problem to be solved.

Psychologists have made the following generalizations about the essence of creation:

- creativity is the ability to respond appropriately to new approaches and the need for new products, and to be aware of new things that exist, even though the process itself may be conscious or unconscious;
- The creation of a new creative product depends, first of all, on the strength of the creative personality and his inner motivation;

- creative process, product and personality traits, their originality, independence, authenticity, functionality and other aesthetic, ecological, optimal form, which can be called necessary, a feature that is now accurate and original

- creative products can be very diverse in nature: new solutions to problems in mathematics, the discovery of a chemical process, the creation of music, pictures or poems, unique solutions to social problems, and more.

From the point of view of acmeology, creativity is described as a process that is unique to many individuals and a set of intellectual and personal characteristics of the individual, which helps to independently propagate problems, create many original ideas and solve them unconventionally.

After analyzing the different approaches to the study of creativity, A. Golovanova summarized the study of creativity from two main aspects - procedural and personal. The study of creativity in the procedural aspect includes the subject of creation of the subject, the features of the change of objective reality in general, as well as the stages and consequences of such change.

In turn, according to most authors, creativity in the pedagogical process is inextricably linked with the innovative activities of higher education, which is one of the key factors in modernizing the educational process and the economy, systematically updating its material and technical potential and increasing university efficiency.

Innovative activity in higher education institutions today takes the status of one of the main types of activity (along with teaching and research) and is a necessary condition for the development of the university. Innovative activity is, first of all, a qualitative stage of personal self-development, a process of self-actualization of the subjects of the educational process, which arises as a result of self-education, self-reflection. Therefore, the processes of self-organization in the educational environment are particularly specific to educational institutions engaged in innovative activities, and it can lead to the emergence of stable structures (creative groups, associations) and the emergence of creative individuals who are able to create a "personal-new" regardless of previous social experience. At the same time, informatization of education is an integral part of the innovative process of educational institutions. Informatization on its basis is a set of measures to change the pedagogical process in this case on the basis of teaching and introduction of information products, tools and technologies in education. The theoretical foundations of educational informatization are first informatics, then cybernetics,

systems theory and didactics. Informatization of education leads to changes in important aspects of the didactic process and changes in the quality of pedagogical activity. Learners can work with a large amount of different information, integrate it, process it, automate modeling processes and solve problems, be independent in learning activities, and more. The teacher is also free from routine operations and has the opportunity to diagnose students, monitor the development dynamics of trainings and exercises. However, the results of numerous studies show that some teachers are not ready to move from the traditional form of education to the use of information technology in education. E-technology is still mainly used as an auxiliary tool of education.

Thus, an analysis of the scientific literature shows that there is no ambiguity in the definition of the essence and concept of creativity. Contrary to many opinions, in almost all definitions, creativity is about creating something new (for the individual and society). Most authors understand creativity as the ability of a person to perceive a problem, using optimal opportunities to create a new, original product of social significance. In turn, the term creation is interpreted as a conscious active human activity aimed at recreating and changing certain phenomena of reality. However, according to basic psychological approaches, creativity and creation should not be separated. According to E. Ilin, this creates confusion and vague definitions in scientific approaches, and they should definitely be avoided. Therefore, although creativity and creation can be separated in life, in science, these concepts should be the same.

References:

1. On the Actions Strategy for further development of the Republic of Uzbekistan. - T.: Decree No. PF-4947- of February 7, 2017
2. The concept of development of the higher education system of the Republic of Uzbekistan until 2030. October 8, 2019
3. Kolosey NS The use of cloud technologies in the educational process is a condition for the joint work of teachers and students / N.S. Kolosey –Access mode: [http://academy.edu.by/files/do%20iikspress/Kolosey.pdf% 20](http://academy.edu.by/files/do%20iikspress/Kolosey.pdf%20)
4. Tkachenko V. Cloud computing (Cloudcomputing) [Electronic resource]. –Access mode: www.lessons-tva.info/archive/nov031.html
5. Koroleva A.S. Innovative technologies of the modern office (Cloud computing): textbook. allowance. "Higher School of Economics", St. Petersburg, 2012. -88p.

6. Vaganova O.I., Dvornikova E.I., Kutepov M.M., Luneva Y.B., Trutanova A.V. Opportunities of cloud technologies in e-learning // International Journal of Applied and Fundamental Research. - 2017. - No. 6-2. - p. 183-187.
7. Dukcardt A.N., Saenko D.S., E.A. Sleptsova E.A. Cloud technologies in education // Journal "Open Education" 2014. - №3 - pp. 28-36.
8. Azizkhadzhaeva N.N. Problematic education in higher education - T.6 RUMTs. 1994,p-34
9. Azizkhadzhaeva N.N. Questions of teacher training in the system of continuous pedagogical education.- 1995.-64 p.
10. Azlarov Yu. Pedagogy technologies. Pedagogic competence.. T.: 2003.-174 p.
11. Azizzhodzhaeva N.N. Family Pedagogy-T .: Uqituvchi, 1998.272 b.
12. Aizenk G.Y. Test your abilities. Translated from English - M .: Pedagogy - Press, 1992, 176 p.
13. Akbarov A.A. Formation of social activity of the future teacher through student self-management .: Author's abstract. -T .: 1991.-22 p.