

METHODS OF RESEARCHING LEVELS OF SCIENTIFIC OUTLOOK IN STUDENTS

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<https://doi.org/10.5281/zenodo.11050233>

Abstract. *The article is based on the methods of researching the levels of scientific outlook in students, the characteristics of the student's scientific outlook and the interdependence of the motivation to achieve success, the psychological factors of students' creativity, and the criteria and indicators of the formation of the scientific outlook in students.*

Keywords: *scientific outlook, creativity, method of determining creative activity.*

In recent years, a strong youth policy with a solid legal basis has been implemented in our republic, as the youth are always at the center of attention of the state and society. «It is necessary to acquire knowledge, skills and abilities based on educational programs, to participate in trainings, to prepare for them independently, to fulfill the tasks of pedagogic staff» [1] is defined as a priority task. In this regard, further development of science in our country, education of our youth as possessors of deep modern knowledge, high spirituality and culture, raising the process of training independent thinking highly qualified personnel to a new level in terms of quality, modernization of higher education, educational efficiency and there is a need to develop psychological proposals and recommendations aimed at improving student learning.

Although many modern scientific researches dedicated to improving the quality of education and forming a scientific worldview have been conducted and solutions have been developed in the scientific centers of the world, the unique mechanisms of educational activities and the individual psychological aspects of teaching students of different groups study of its characteristics remains relevant.

In higher education and scientific institutions, the problems of scientific worldview, independent thinking, mental potential are considered as the basis for the success of his educational activities, and scientific researches are conducted on his intellectual formation. According to the Global Creativity Index (GCI) report, countries with a high level of support for the scientific, practical and creative spheres are characterized by an increase in the rate of formation of a scientific outlook. In this regard, the rapid exchange of information, the use of modernized methods of education based on modern technologies in the organization of student education in the conditions of informational diversity, the formation of a team of intellectual youth by strengthening their intellectual potential, the training of talented students to be competent, the formation of the intellect of students there is a need to pay special attention to socio-psychological research aimed at changing the educational conditions of educational institutions.

The analysis of scientific and practical literature and scientific research judgments based on our own observations today require students to study the psychological aspects of the scientific worldview and the levels of its formation from an empirical point of view.

First of all, it is necessary to determine the degree of formation of the positive and negative qualities of the scientific worldview in students of the higher education institution, as well as the psychological factors and criteria, and to analyze each of them separately, so that appropriate methods should be selected and developed.

Based on the above-mentioned psychological structures, a system of criteria of scientific outlook was developed in our research, and on the basis of this system, we studied, analyzed and tried to draw appropriate conclusions about the development levels of scientific outlook in students.

Below, we used the following methods during our research.

1. G. Gardner "Methodology for determining types of intelligence";
2. "Methodology for determining creativity" (N.F. Vishnyakova);
3. Questionnaire for diagnosing social values of a person;
4. Socio-psychological survey of students' levels of independent thinking.

Researching the level of students' scientific outlook is one of the most important problems in the modern education system. Because students' acquisition of knowledge in their specialty, study of the field on the basis of clear scientific terminology remains an urgent issue today. Based on the above scientific sources, in our study we also investigated the processes of factors directly related to the activity of students' scientific outlook.

For this, a mechanism of empirical study of cognitive factors was developed, and through this system, we studied the factors of creativity of students studying in the higher education system and formed relevant scientific and practical conclusions.

The educational and scientific worldview of students, their desire for success is considered a very important stage. Because, if any student has the characteristics of a scientific worldview and the motivation to achieve success at an adequate level, his scientific activity will be positive. In the same place, in the course of our research, we effectively used the methodology of T. Ellers "Diagnosing the motivation to avoid defeat" in order to determine the motivations of students to achieve success and avoid defeat. This questionnaire is designed to determine the motivational direction of a person to achieve success. The level of motivation for success is evaluated by the number of points corresponding to the key.

To achieve success, the Ellers test is used to determine the directions of a person's motivational field. To determine achievement motivation, the following approach of Ellers is used in personality diagnosis: a person with the main motivation for achievement prefers medium or low-risk situations. He tends to avoid high levels of risk. A person with a strong motivation for success and a desire to achieve success usually has lower expectations than a person with a weak motivation for success, but such individuals work hard to achieve success and strive for success.

The analysis of the obtained results showed that the indicators of the desire for success of the students of the 4th level are higher than those of the students of the 2nd level. Students of this category perform their activities with determination, always strive to become stronger. At the same time, they strive to help others. In general, we can see that in both groups of subjects, the indicator of the pursuit of success is relatively higher than the indicators of avoidance of failure. Ensuring the "I" of students is formed as a result of the need to achieve success in a certain system of positive relationships. Failure avoidance motivation accounted for high performance in Level 2 students. It was observed that students studying at the 2nd stage of higher education institutions have a relatively poorly formed scientific worldview. Instead of scientific terms, they use the methods analyzed by themselves more often during their educational activities.

In the next step of our research, in the study of the specific psychological aspects of the factors influencing the students' scientific worldview, "Determining the 5-factor creative activity

(M.I. Rozhkova, Y.S. Tyunnikova;) (modified by B.S. Alishyeva, L.A. Volovish and others option)" methodology was used.

This methodology is designed for the comparative analysis of changes in the formation of creative activity of students and consists of 5 scales. The method of determining 5-factor creative activity" consists of 56 questions, with the possibility of choosing 3 answers for each question.

1. "The sense of novelty" is the process of searching, processing and changing information aimed at discovering something new.

2. "'Criticism" criterion represents the developmental stages of thinking, the ability to analyze, and the attitude to reality. The criterion of criticality includes concepts such as "evaluation" and "self-evaluation", "criticism" and "self-criticism", "proof" and "refutation", "critical analysis".

3. "The criterion "ability to change the structure of the object" is the ability to determine the main feature of the object and propose a new way of using it.

4. "The criterion of "Creativity" is the ability in certain critical situations and the courage to solve problems, which allows to correct the situation and achieve the desired result even with the help of a simple gap that seems hopeless, i.e. to fail. is a problem-solving trait with a non-sealing approach that implies risk of harm or receiving negative evaluations from others.

5. Self-assessment (control questionnaire) criterion - an ideal standard that provides high aesthetic, moral, intellectual assessments, membership, aspiration and stability of activity, awareness of mental activity, evaluation and self-satisfaction with these characteristics level.

Ratings are made according to four criteria: sense of novelty; criticality; the ability to change the composition of the object; orientation to creativity. There is also a control questionnaire that provides for self-evaluation and comparison of qualities performed by subjects in the evaluation of questions. This methodology is intended for persons aged 16-25. A control survey is also provided that involves the comparison of response evaluations and self-ratings of qualities performed by subjects. Criterion evaluation is based on students' average score for each criterion. At the same time, it is important to compare the obtained results with the self-assessment, which is increased in the last section of the questionnaire. Self-evaluation according to the criterion "Sense of novelty" is determined by the average score of the answers to questions 41-44. to questions 45-48 to the criterion of "criticality"; "Ability to change the structure of the object" criterion for questions 49-52; The criterion "Creative orientation" is obtained from the average value of the answers to questions 53-56. For example, according to the "newness" criterion, the average score was 1.45, and "the ability to change the structure of the object" was 0.9. In this case, we will conduct corrective work on students based on the criterion "Ability to change the structure of the object". Therefore, the applied method serves as a basis for drawing scientific and practical conclusions, based on the analysis of the answers given to study the creativity that affects the scientific worldview of students and to observe it at a certain level. does:

Now let's move on to the analysis obtained by this method.

Currently, in many developed countries of the world, a lot of experience has been accumulated in the use of new psychological technologies that increase the scientific activity and creativity of students and, at the same time, guarantee the effectiveness of the educational process. The scientific activity of students is the acquisition of new knowledge about the subject of scientific work through a set of scientific work tools and specific methods. Therefore, their creativity directly plays an important role in learning the scientific worldview of students. Now, let's dwell on the

general overview of the manifestation of creative motivation in students. The first court "appeal to the criterion". The average score of students on this scale was 4.7 in the 2nd stage, and 6.3 in the 4th stage. This state of self-examination is the discipline of innovation that provides both spiritual, physical, and social-psychological support to students, which helps students to seek to discover any new things and to see them in their work. The attitude of students to the news directly serves the fight against the scientific world.

1-table

Psychological characteristics of the manifestation of creative motivation in students related to educational activities (n=210)

Motivation	Testers	n1 n2	Average	T	P
“A sense of freshness”	2nd stage	120	4,7	2,1	0,05
	4th stage	90	6,3		
“Criticism” criterion	2nd stage	120	4,9	2,0	0,05
	4th stage	90	6,1		
“The ability to change the structure of the object” criterion	2nd stage	120	4,2	1,8	0,05
	4th stage	90	3,1		
“Orientation to creativity” criterion	2nd stage	120	5,0	1,9	0,05
	4th stage	90	6,1		
“Self-realization (control questionnaire)” criterion	2nd stage	120	5,2	2,6	0,05
	4th stage	90	6,4		

The students' score on the criterion of "criticality" (4.9 in the 2nd stage and 6.1 in the 4th stage) allows them to better understand different situations, to correctly assess complex situations between people, to self- Adequate assessment of oneself and others, as well as the ability to reject other people's opinions when the time comes, show that there are opportunities to develop the ability to critically analyze complex situations depending on the participation of the participants in the dialogue.

The next scale that assesses the manifestation of creative motivation in students is the criterion "Working on the structure of the object", according to which the student's indicator has 4.2 points in the 2nd stage and 3.1 points in the 4th stage. ladi they did. This point is to encourage students to develop new methods and implement their own projects accordingly. Interpersonal helps to better understand products, software analysis, production logic, software development. Also, based on the real situation in the transaction, they can evaluate what it will end up with, sometimes in unexpected and unusual situations, they can make mistakes in forecasting behavior, and it serves to ensure that they carefully develop their plans to achieve the set goal.

In the analysis of scientific-theoretical sources, it can be mentioned that the motivation of creativity, which is manifested during the activity of students, has a special place. Another characteristic of students' creative motivation is the ability to be creatively oriented. In this regard, the general appearance of creativity among students is as follows (5.0 in the 2nd stage and 6.1 in the 4th stage), that is, it shows a slightly lower value than the results of other criteria. This is a sign

of students' inability to manage themselves properly in various complex situations, giving in to frustration, and patiently overcoming any difficulties in the way of their goals, as well as being able to solve problems in various situations, courage and tenacity. witnessed that they are not sufficiently formed, it is difficult for them to endure and solve any problem.

According to the criterion of self-evaluation (control questionnaire) students (5.2 in the 2nd stage and 6.4 in the 4th stage), according to the nature of interpersonal relations, they quickly and we can see that they have a tendency to good understanding, the qualities of aesthetic and moral education are formed in them. We think that this ability indicates that students are able to make their own definitions based not only on relationships with people, but also on the opinions and attitudes expressed by students in the field of science.

Thus, the results of our research proved the role of the motivation of creative activity affecting the students' scientific worldview and the social psychological factors affecting their actual social behavior, and the importance of the presence of creative activity motivation in them from a social psychological point of view was considered.

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