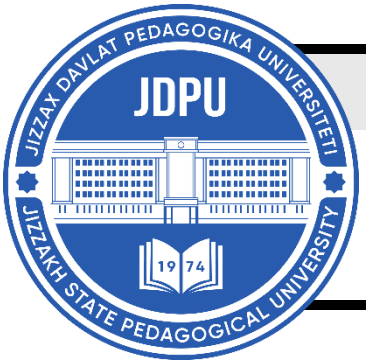
DOI: https://doi.org/10.37547/mesmj-V5-I3-05 Pages: 30-36

MENTAL ENLIGHTENMENT SCIENTIFIC – METHODOLOGICAL JOURNAL



MENTAL ENLIGHTENMENT SCIENTIFIC – METHODOLOGICAL JOURNAL

http://mentaljournal-jspu.uz/index.php/mesmj/index

DIDACTICAL BASICS OF FORMATION OF STUDENTS' CREATIVE ABILITIES

Nilufar Boltaboyevna Bekchanova
PhD student
Urganch State University,
Urganch, Uzbekistan
E-mail: bekchanova.nilufar88@gmail.com

ABOUT ARTICLE

Key words: cognitive ability, creative thinking, imagination, educational and creative activity, reflection, natural literacy, innovative technology, personality development, reproductive, motivation, constructive activity, integration.

Received: 09.04.24
Accepted: 11.04.24
Published: 13.04.24

Abstract: This article analytically describes the pedagogical and psychological foundations of the formation of students' creative abilities. It emphasizes the issues of creative approach to the process of natural science education. Improving the natural scientific literacy of students is based on meaningful and technological elements of educational and creative activities, the influence of various didactic conditions on the development of creative abilities.

INTRODUCTION

Informatization of society, rapid changes in technologies, specific characteristics of the professional activity of a modern person determine a number of requirements for education and upbringing of the young generation. Future elementary school teachers are required to be highly intellectually organized, proactive and creative thinking personnel who are able to not only master the new technological culture, but also to develop it.

The priority areas of education have shifted from the formation of certain knowledge, skills and qualifications to the stage of development of intellectual and creative abilities of students. Each subject is required to solve the problems of formation of creative abilities by organizing educational activities within its concept. The need to form creative abilities in the educational system determines the need to develop educational and creative activity technologies, forms, methods and tools of this process, to create appropriate didactic and educational-methodical support, and to create sets of educational and creative tasks.

THE MAIN RESULTS AND FINDINGS

The issues of creative thinking and its diagnosis are reflected in the researches of G.S.Altshuller, V.A.Antonov, E.Bono, T.Vujek, X.Zivert, M.I.Meerovich, D.Perkins, A.M.Spirkin, Y.G.Tamberg, E.P.Torrens, E.E.Tunik, D.V.Ushakov, Y.M.Chyapyale, D.Eymen [8, 9, 10]. Methodological aspects of formation of creative abilities were studied by S.S. Bakulevskii, A.S. Kozlov, S.N. Orlova, L.N. Sedova, B.V. Temnik, A.V. Khutorsky, M.V. Shergin [11, 12]. G. Helmholtz, A. Poincaré, G. I. Ivanov, A. A. Bystritsky, L. L. Gurova, A. F. Esaulov [13, 14] in their research paid special attention to the organization of creative tasks as the main means of forming creative abilities.

M.B. Akhmedov development of creative activity of students in extracurricular activities, N.B. Matkarimova formation of creative abilities of students of presidential schools based on the acmeological approach, J.B. Mamadiyorov development of creative and practical activity skills of future primary school teachers, L.K. Narimbayeva use of cluster approach in development of intellectual and creative abilities of students, O.R. Khujaniyozova on the basis of a creative approach, improvement of the content of orientation to creative labor activities, K.Kh. Allaberdiyeva, neuropedagogical possibilities of forming creative activity in preschool children, K.R. Suvanova, researches were conducted in the direction of creativity formation based on examples of visual art in elementary school students [1, 2, 3, 4, 5, 6].

Despite the fact that the general issues of creativity, creative abilities, educational and creative activity are studied based on different approaches, there are needs related to the development of more specific models and forms of organizing this activity, improvement of methods and means of developing the creative potential of an individual, creation of new educational and creative task complexes. Practice shows that the methodology of formation of creative abilities changes significantly when studying different academic subjects.

It was determined that there are a number of problems related to the need to develop creative abilities of future teachers and the insufficient development of models, technology, tools and conditions for educational and creative activities, materials developed depending on the subject and subject in the modern education system. A study was conducted based on the identification of meaningful and technological elements of educational and creative activity in the field of sciences, and the identification of pedagogical conditions that help to increase the effectiveness of the process of formation of creative abilities.

Creative research is mainly conducted in three directions.

The first direction is to study, analyze and continue the teachings and works of scientists who were effective in the field of science, made major discoveries, and managed to change the priority concepts of their time.

The second method is the model experiment method, which is based on obtaining valuable information using a creative model. It has the possibility of wide application in educational and research. A special feature is that a problem is created and you are alerted that there is a solution.

The third method is based on the study of the characteristics of a creative person, using questionnaires, psychological tests, and statistical methods.

Diagnostic, purposeful, meaningful, technological and result-oriented control, taking into account the informational, logical-structural, intuitive-imagery and reflexive blocks, built on the basis of the characteristics of individuals, the characteristics of the methods of finding solutions and the characteristics of creative tasks, and the characteristics of the levels of educational and creative activity. a model for the formation of creative abilities of future elementary school teachers, including components, was developed.

Structural elements of the technology of forming students' creative abilities were identified based on creative problem solving algorithms.

Blocks of creative tasks are created in accordance with the specific characteristics of the teaching material of natural sciences and the creative abilities of primary school students.

The theory of pedagogical creativity of the teacher is complemented by the description of the components, levels and connections of the process of formation of students' creative abilities and educational-creative activity.

Organizational, substantive and technological conditions were formed that allow differentiation and individualization of students' educational and creative activities. The technological algorithm of forming students' creative abilities was determined, and educational and creative tasks, trainings and exercises aimed at the comprehensive formation of creative abilities were systematized.

Creative abilities are formed during creative activity. It is an integral part of cognitive, constructive, literary, management, including educational activities. Educational and creative activities based on the interaction of motivational, cognitive, creative and reflexive components help to form creative abilities more effectively.

In the successful formation of students' creative abilities, motivation, which is a source of driving force, observation (thoroughness), which leads to interest and wonder, knowledge that helps to compare and analyze data, cognitive ability, synthesis of new knowledge, broad imagination and creativity to give ideas the ability to think, independent thinking, and perseverance are important for their realization. The intensity of educational and creative activity is determined by the intellectual and creative characteristics of the person solving the problem, the characteristics of the methods of finding solutions to problems, the specific characteristics of creative problems, the process of solving them includes diagnostic, informational, structural and logical, intuitive-figurative and reflexive blocks.

The technology of formation of creative abilities of students in the educational process requires having tools that allow modeling the educational process in different conditions, aimed at forming different groups of creative abilities, providing diagnostic tools, classifying different groups of creative abilities and developing criteria for their evaluation.

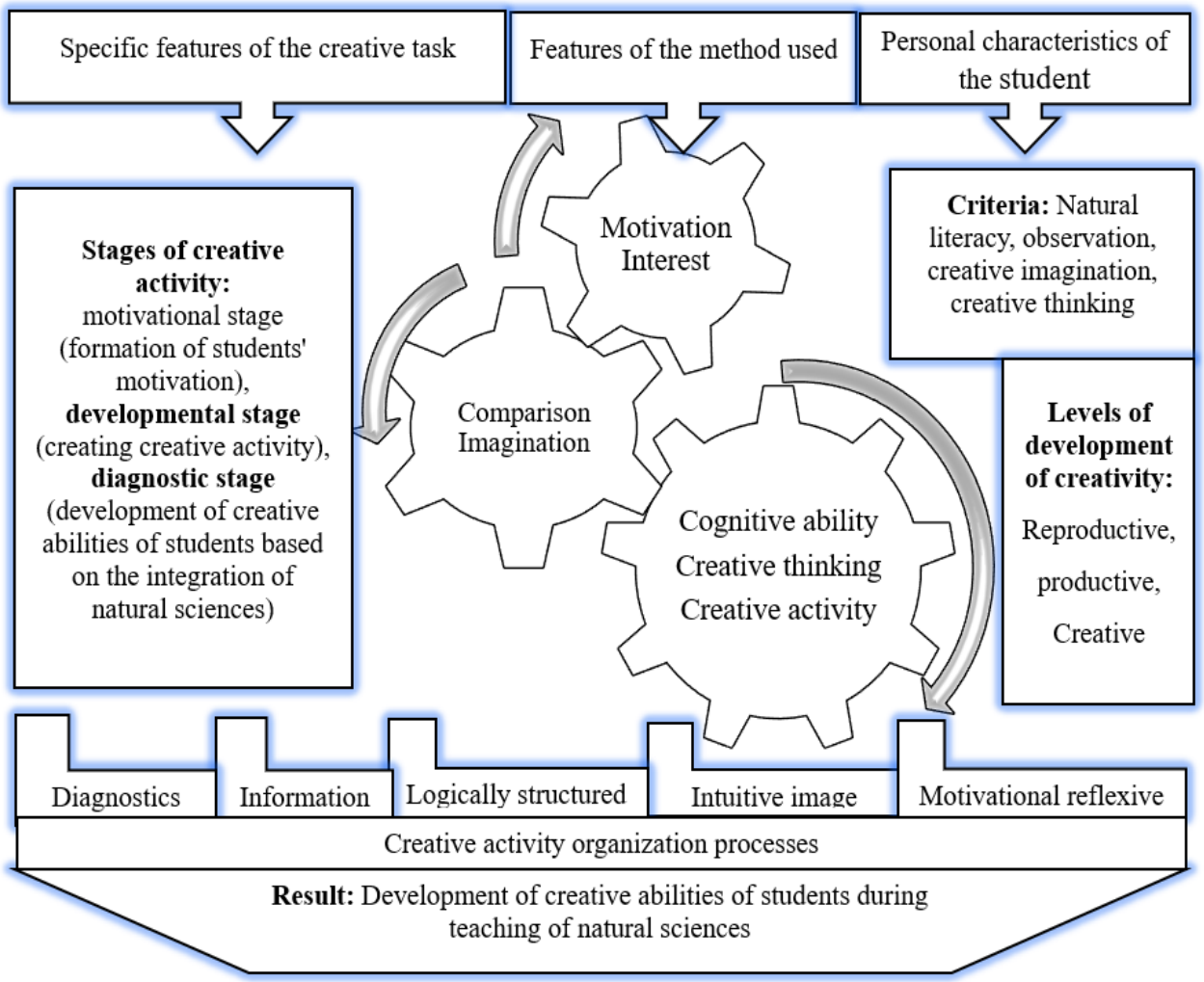


Figure 1. A model for the development of creative activity during the teaching of natural sciences

The technology of developing students' creative abilities is a complex, multi-level, hierarchical model, which includes educational-organizational, educational-informational, educational-intellectual and educational-communicative activities. Each of the types of activities in turn covers different components, obeys the laws of stepwise development, is connected within the component elements and with other components through certain relationships, and also has its own characteristics in the subject area.Pedagogical conditions for the formation of creative abilities of students are as follows: the appropriateness and accuracy of the content of the educational process, specific criteria for evaluating the development of the level of creative abilities of students, the implementation of the rules describing the essence of the subjective creative activity of the student in the educational process

of natural sciences. increase, using the model - the system of developing students' creative abilities, taking into account and coordinating the individual and group characteristics of creative project activities, the target directions of educational activities, systematically and continuously increasing the diversity of students' creative activities in the integrity of the process of increasing natural literacy it is intended to use non-standard methods, forms, tools representing the components of innovative technologies of personality formation and development in the educational process.

The method of developing creative abilities in future elementary school teachers along with the formation of a natural-scientific worldview is the didactic possibilities of the pedagogical process (knowing, learning, trying in practice, thinking, observing) high level of independence of thinking (understanding, thinking, decision-making) was improved based on prioritizing the manifestation. Creating the practical component of the pedagogical process and didactic situations aimed at the development of creative abilities based on the integration of natural scientific literacy in accordance with the personal characteristics of the student, the characteristics of the applied method and the content of the subject, creating creative inclinations through demonstration, practical tasks, creative games, intellectual activity it is possible to achieve development on the basis of organization on the basis of consistent (planning, management). The organizational-methodical component of organizing students' scientific, educational, and creative activities in the teaching of natural sciences is the cognitive (orientation to the scientific worldview) of innovative teaching, the didactic component of emotional (knowledge and learning) decision-making that reflects personal attitude to pedagogical activity. improved on the basis of supply (planning, programming, design). The logical structure aimed at the development of creative abilities of future elementary school teachers based on the integration of natural sciences was developed on the basis of the development of a pedagogical process aimed at improving the content of activities in the fields of personal development (individual, cooperative).

A worldview is a system of dialectical views and beliefs that determine the development of nature, society and the content of thinking and personal activity. Beliefs formed on the basis of socio-ideological, philosophical, economic, natural-scientific, spiritual-ethical, aesthetic, legal and ecological knowledge appear as the main structural elements within this system. Students' opportunities to develop creative abilities, natural-scientific worldview in the field of science change due to the increase of their life experiences, in this process, their thinking improves. Also, at each age stage of a person's development, certain activities, new mental processes and the formation of personal characteristics are of leading importance. The development of creative abilities in the field of science plays an important role in their thorough assimilation of the fundamentals of natural, social and humanitarian sciences taught in educational institutions. As the spiritual and moral image of a person, his life approaches, the set of values and moral principles of priority importance for him mark

the content of the world view, they are also reflected in the products of creativity. A creative approach is of particular importance in the integration of the pedagogical process. Because in order to form creative abilities of students in the field of science, it is necessary to bring psychological and pedagogical principles into one system and create an algorithm to follow it. The possibilities of forming a scientific worldview in students based on the integration of the pedagogical process are based on several psychological and pedagogical laws.

CONCLUSION

The process of solving creative tasks includes the stages of information acquisition, application and transformation. This not only determines the effectiveness of the formation of creative abilities, but also helps to enrich and shape the spiritual world of students.

It is desirable to give priority to the frontal form of teaching at the reproductive level of educational and creative activity, to use certain examples and algorithms of creative activity. Dissatisfaction of students with the process of reproductive activity and their results is reflected in their interest in solving tasks of a creative nature, their aspiration, conducting research, engaging in discussions, and reacting to creative solutions. Today, leading scientists, psychologists and teachers consider the development of the creative potential of a student as the main goal of education, the urgency of the problem of developing a creative personality is increasing due to the changes in our educational system - the introduction of specialized personnel training.

REFERENCES

1. Axmedov M.B. Darsdan tashqari mashg‘ulotlarda o‘quvchilarning ijodiy faoliyatini rivojlantirish metodikasi: Avtoref. dis. … ped. fan. falsafa doktori (PhD). –Chirchiq: 2023. -49 b.

2. Matkarimova N.B. Akmeologik yondashuv asosida prezident maktablari o‘quvchilarining ijodiy qobiliyatini shakllantirish texnologiyasi: Avtoref. dis. … ped. fan. falsafa doktori (PhD). –Chirchiq: 2023. -55 b.

3. Mamadiyorov J.B. Bo‘lajak boshlang‘ich sinf o‘qituvchilarining ijodiy-amaliy faoliyat ko‘nikmalarini rivojlantirish metodikasi: Avtoref. dis. … ped. fan. falsafa doktori (PhD). –T.: 2023. -46 b.

4. Narimbayeva L.K. Talabalarning intellektual-ijodiy qobiliyatini rivojlantirishda klaster yondashuvidan foydalanish: Avtoref. dis. … ped. fan. falsafa doktori (PhD). –Chirchiq: 2023. -55 b.

5. Xujaniyozova O.R. O‘quvchilarni kreativ yondashuv asosida ijodiy mehnat faoliyatiga yo‘naltirish mazmunini takomillashtirish (7–9-sinf o‘quvchilari misolida): Avtoref. dis. … ped. fan. falsafa doktori (PhD). –Chirchiq: 2023. -56 b.

6. Allaberdiyeva K.X. Maktabgacha katta yoshdagi bolalarda ijodiy faollikni shakllantirishning neyropedagogik imkoniyatlari: Avtoref. dis. … ped. fan. falsafa doktori (PhD). –T.: 2023. -50 b.

7. Suvanova K.R. Boshlang‘ich sinf o‘quvchilarida tasviriy san’at namunalari asosida ijodkorlikni shakllantirish: Avtoref. dis. … ped. fan. falsafa doktori (PhD). –Samarqand: 2023. -21 b.

8. Альтшуллер, Г.С. Крылья для Икара: Как решать изобретательские задачи / Г.С. Альтшуллер, А.Б. Селюцкий. Петрозаводск: Карелия,1980.-224 с.

9. Антонов, А.В. Психология изобретательского творчества / А.В. Антонов. Киев: Вища школа, 1978. — 175 с

10. Боно Э. Учите вашего ребенка мыслить / Э. Боно. Минск: ООО «Попурри», 1998. - 336 с.

11. Орлова, С.Н. Психологические факторы развития творческого мышления личности в процессе когнитивной деятельности: дис. . д-ра пед. наук / С.Н. Орлова. Новосибирск, 2002. - 328 с.

12. Козлов, А.С. Педагогические условия использования современных методов творчества как средства подготовки учителя технологии: дис. . канд. пед. наук / А.С. Козлов. Новосибирск: Изд. НГПУ, 2002. - 256 с.

13. Иванов, Г.И. Формулы творчества, или как научиться изобретать: кн. для учащихся ст. классов / Г.И. Иванов. М.: Просвещение, 1994. - 207 с.

14. Гурова, Л.Л. Психологический анализ решения задач / Л.Л. Гурова. -Воронеж, 1976.- 372 с.