Vol. 10, No. 1 (2023), 144-151



UDC 373.3.091.398:159.955-043.86-026.15 doi: 10.15330/jpnu.10.1.144-151

MODEL OF THE DEVELOPMENT OF CREATIVE THINKING PRIMARY SCHOOL STUDENTS IN THE PROCESS OF EXTRACURRICULAR WORK

Oksana Bilier, Olha Vasko

Abstract. The article considers the possibilities of modeling based on which a model of the development of creative thinking primary school students in the process of extracurricular work is theoretically justified and developed, which has three components: the first component is the parts of creative thinking, namely: creative imagination, the ability to speak new and associative and figurative thinking. The second component is the methods of development creative thinking, within the scope of the study they were defined as: educational and developmental methods, motivational methods and creative and productive methods. The third component is pedagogical conditions for the development of creative thinking. Pedagogical conditions included: activation of creative activity, which is realized through the activation of thinking, creative imagination, observation of each student; giving the teacher freedom of action to demonstrate his creative abilities while performing tasks aimed at developing creativity; the introduction of game moments that motivate the creative activity of students, give an opportunity to be realized in a more favorable, psychologically positive atmosphere; the ability to create a sense of satisfaction and joy from success in students, the development of creativity; creation of an art space: a classroom, relaxation art corners, a hobby workshop, a gallery of student creativity; the use of innovative technologies in the process of extracurricular activities, for example, project activities.

It was determined that in accordance with the characterized pedagogical conditions, it is appropriate to use certain groups of methods: educational and developmental, aimed at identifying the creative potential of students and directing it to the formation of creativity structural components; motivational, which should interest students in the process of learning about the new, unknown, actualize knowledge bases, promote active creativity in the process of extracurricular activities; creative and productive, which summarize the mastered material, reflect the quality and level of specific knowledge, skills and abilities acquired in the lessons; creative learning methods, which include those that are traditionally intuitive: brainstorming, empathy, etc.

It's confirmed that within the framework of the implementation of this model, the main task of the teacher is to manage the processes of creative search: creating a situation of creative activity of primary school students, developing their imagination, associative thinking, the ability to understand patterns, the desire to constantly improve, to solve more and more complex creative problems.

Keywords: model, development, creativity, thinking, primary school students.

1. INTRODUCTION

In the period of rapid scientific and technical development, rapid growth of scientific knowledge and its widespread use in production, one of the education main tasks is the development of creative thinking, cognitive abilities of students, their ability to independently supplement their knowledge. Solving this problem is organically connected with the activation of the educational process, with the development of methods and techniques aimed at the formation of students' cognitive activity, the development of their intellectual abilities and the formation of creative qualities.

The social demand for a creative personality is reflected in educational legislation, which emphasizes the priority of forming a modern personality capable of reality creative transformation. The Law of Ukraine "About Education", The National Doctrine of the Development of Education of Ukraine in the 21st Century, industry standards of higher education, The National Strategy for the Development of Education in Ukraine for 2012-2021 state that education should ensure the formation of not only the system of knowledge, the scientific outlook of students, but also the development of their creativity, skills of independent creative search, self-education and self-realization. The task of developing creativity in the educational process of primary school is of particular importance. An important part of this process is extracurricular work, which is closely related to the educational activities of primary school students, and at the same time provides ample opportunities for their development.

2. THEORETICAL BACKGROUND

The problem of creativity has been repeatedly addressed by domestic and foreign researchers. To date, the psychological aspects of the development of creative thinking have been widely developed by L. Vygotsky, A. Leontiev, Ya. Ponomariov, S. Rubinstein, B. Teplov, P. Torrens, V. Frankl, etc.; options for its diagnosis and development in preschool age have been created by D. Bogoyavlenska, O. Belova, I. Volkov, V. Druzhynin, A. Matyushkin, O. Tikhomirov, E. Telegina, N. Shumakova, etc.

The concept of creative education became the subject of research by such scientists as O. Antonova, S. Sysoeva, A. Sologub, A. Khutorsky. The scientific works of O. Pometun, H. Selevka, V. Chayka and others are devoted to modern pedagogical technologies for the creativity development.

However, despite the significant coverage of the issue of the development of students' creativity in scientific literature, the problem of the development creative thinking of primary school students in the process of extracurricular work has not yet become the subject of a separate study.

3. RESEARCH OBJECTIVE, METHODOLOGY AND DATA

The purpose of the research – theoretically substantiate and develop the model of the development of creative thinking primary school students in the process of extracurricular work

Methodology. At the current stage of society's development, there is a tendency for pedagogy to move from descriptiveness to schematic modeling and projecting of a new reality. To carry out such a transition, it is necessary to involve "pedagogical modeling", which includes concepts such as "model" and "simulation".

Thus, "model" in translation from the French language (modele) means a measure, sample, norm, and from the Latin (modeling) means a certain image or a simplified description of a

complex phenomenon or process, that is, a model or algorithm of actions that reproduces the structure and action of any – of any object and is used to obtain new knowledge about it.

The "Big Explanatory Dictionary of the Ukrainian Language" defines a model as "an imaginary or conventional (image, description, scheme, etc.) image of any object, process or phenomenon, which is used as its representative" ("A Large Explanatory Dictionary of the Ukrainian Language", n.d.).

Under the pedagogical model of O. Dakhin (Humeniuk, n.d.) understands a complete system of elements consisting of goals, content, the process of designing educational technologies, means of managing the educational process, curricula and programs. The author interprets the model as an artificially created object in the form of diagrams, physical structures, symbolic forms or formulas, which, being similar to the object (or phenomenon) under study, reflects and reproduces in a simpler and rougher structure forms, properties, interdependent relationships "joints".

The scientist considers pedagogical modeling as an independent direction in the technique of pedagogical research. The latter has specific features that reflect the specificity of modeling phenomena. O. Dakhin believes that pedagogical modeling always defines the problem and content, the content of which is based on pedagogical experience. Depending on the nature of the research, two types of pedagogical modeling are distinguished: fragmentary-objective and symbolic. The peculiarity of pedagogical subjects is that they are real fragments of pedagogical activity that reproduce the functions of the simulated subject. Object modeling differs from character modeling in that it is associated with signs (Humeniuk, n.d.). Note that these include educational activity organization schemes, formulas for calculation and effectiveness of teaching methods, a scale for evaluating educational competencies, and others.

Summarizing all of the above, we can conclude that pedagogical modeling is an activity of the subject of education aimed at building (or creating) models of educational processes (or educational systems), the content of which is: analysis of pedagogical problems, their causes; building bases and value strategies; definition of goals and objectives; search for methods and means of implementing the pedagogical model.

Pavlenko (2015) defines the following mandatory requirements for creating models: consistency of the created model with the educational space in which it should function; simplicity of the model, only the most important features of the model are taken into account during modeling, discarding the less important ones; the adequacy of the model is expressed in the ability to achieve pedagogical goals, while the model must be accurate and true.

The modeling process includes: analysis of pedagogical problems, their causes; building bases and value strategies; definition of goals and objectives; search for methods and means of implementing the pedagogical model. Creating and studying a pedagogical model helps to gain new knowledge about the objects being modeled.

In this context, we faced the need to create a model for the development of creative thinking of elementary school students in the process of extracurricular work.

In order for the model to function effectively, it is necessary to create appropriate pedagogical conditions.

We consider the concept of "condition" as a necessary circumstance that enables the implementation, creation, formation of something or contributes to the development of something, in our research, the development of creativity (Yarmachenko, 2001).

The generalization of the results of the analysis of scientific sources made it possible to determine the pedagogical conditions favorable for the development of children's primary school age creativity.

As you know, extracurricular activities have potential opportunities for the development of a creative and active personality. It provides for the creation of conditions in which the interests of primary school students will develop on the basis of free choice, understanding of spiritual and moral values and cultural traditions. At the same time, productive extracurricular activities involve the use of stimulating means to develop the creative potential of younger schoolchildren.

4. RESULTS AND DISCUSSION

After analyzing the methodological literature, we created a model for the development of creative thinking of elementary school students in the process of extracurricular work, which included three components. The first component is the components of creative thinking, namely: creative imagination the ability to speak new and associative and figurative thinking. The second component is the methods of development of creative thinking, within the scope of the study they were defined as: educational and developmental methods, motivational methods and creative and productive methods. The third component is the pedagogical conditions for the implementation of the development of creative thinking, namely: activation of creative activity; art space; use of innovative technologies in the process of extracurricular work (see Fig. 1).

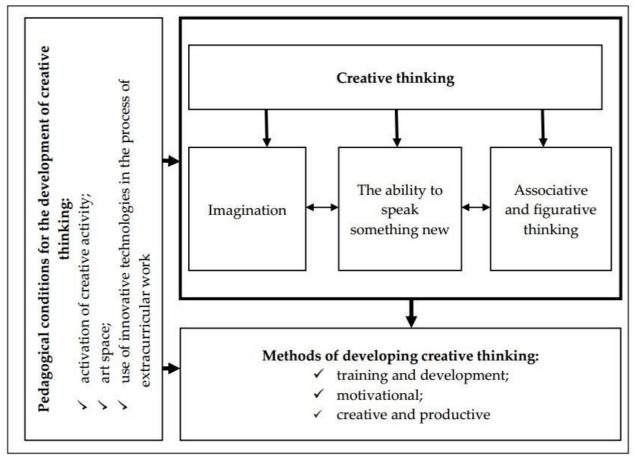


Fig. 1 Model of the development of creative thinking of elementary school students in the process of extracurricular work

Let's consider each of the identified components separately in more detail. Thus, the effective development of creative thinking of younger schoolchildren in the process of extracurricular work can be seen in the description and application of pedagogical conditions.

The first condition – activation of creative activity is implemented through the activation of thinking, creative imagination, observation of each student; giving the teacher freedom of action to demonstrate his creative abilities while performing tasks aimed at developing creativity; the introduction of game moments that motivate the creative activity of students, give an opportunity to be realized in a more favorable, psychologically positive atmosphere; the ability to evoke in

students a sense of satisfaction and joy from success, the development of creativity.

The task of the teacher, according to the components of creativity, is to make each student an active member of the game team, to create relationships between students based on friendship, justice, and responsibility. This is possible if such modern game technologies as quest technologies, show technologies, business game technologies, role-playing technologies, etc. are used in extracurricular educational work (Khymynets & Kiryk, 2012).

It is important in this condition to direct attention to the development of creative thinking through involvement in artistic activities. Primary school students should not reproduce the teacher's actions. The teacher must activate the inner potential of the student, motivate him to show his individuality.

Motivation and personality interact with the environment and elements of the creative process to activate the development of the child's creativity. The individual creative process is influenced by the ability to synthesize information from the general knowledge base, knowledge skills in a specific field, and perception of life experience. This multidimensional interaction gives way to realize many aspects of creativity.

As noted by Klymenko (2002), the formation of interest will take place more effectively if the basis for it is first prepared, later – a positive attitude towards the subject or activity is created, and finally - appropriate interests are formed in the process of specially organized cognitive and creative activities in primary school students' classes

The next condition for the development of creative thinking was defined as the creation of an art space. Here we included classroom design, relaxation art corners, workshops based on interests, a gallery of student creativity, etc. Being in an atmosphere of creativity and creativity every day, it will be easier for younger schoolchildren to express themselves while performing various tasks in the process of extracurricular work. It is also appropriate to give students the opportunity to hear a positive assessment of the task they have completed and to convey to schoolchildren that the product of their creative activity should be valuable first of all for themselves.

The third condition is the use of innovative technologies in the process of extracurricular work. One of these technologies is the project activity of primary school students. The use of projects in extracurricular work allows you to add almost all students to the educational process and organize cooperation between the teacher and students through active, creative and creative activities.

Because of the multifaceted nature of creativity, there is considerable debate about measuring creativity as it grows. There are also many theories about how creativity develops throughout life. Creativity can develop gradually as a person matures and gains life experience, or it can develop gradually, with peaks and troughs that occur over time. Creativity may be only one aspect of the overall cognitive and affective development of the individual, the different components of which can be measured by different methods at different stages of development.

Within the framework of the implementation of this pedagogical condition, in order to interest primary school students in project-based extracurricular activities, the teacher as a project manager must take into account the following:

- the most important condition for students' participation in the implementation of the project is their interest and a high degree of interest;
- @a significant, almost decisive role is played by the topic of the project itself, which must be chosen personally by the students;
 - in project activities, students make decisions independently, without the teacher's insistence;
- @ each project participant must clearly know the significance, usefulness and expediency of the work performed;
- the division of schoolchildren into project groups and the planned execution of tasks should take place on a voluntary basis, without extraneous pressure from adults, etc. (Bukharieva, 2012).

The indicated pedagogical conditions will become effective when using non-standard methods of developing the younger schoolchildren creativity in the process of extracurricular work.

In the context of this study and in accordance with the third component model of the development of primary school students' creative thinking, it is appropriate to use educational and developmental methods aimed at identifying the creative potential of schoolchildren and targeting its influence on the formation of structural components of creativity, namely: associative and figurative thinking, creative imagination, artistic observation. Such methods include figurative-associative ("Associative-figurative hints", "Symbolic signs" etc.), imaginative-reproducible ("Imagine and paint", "Verbal fantasizing", "Add details", "Chain of transformation" etc.) and fixed - memorizing ones ("Art Labyrinth", "Find the Connection" etc.), pursuing the formation of the specified structural components of primary school students' creativity.

The next type of methods is motivational, the purpose of this group of methods is to interest students in the process of learning new, unknown, updating basic knowledge, providing students with instructions for active creative activity in the process of extracurricular work.

We will give an example of creative search instructions, which can be used by elementary school teachers in the process of students' performance of various tasks during extracurricular work.

Instructions for Creative Search

Concentrate. Don't worry and take your time! Calmly focus on the task at hand. What should be done?

Imagine. Imagine! Generate ideas!

Create an imaginary plan. Answer the question: What will it be? How to do it? What are the details? What is needed to realize your idea?

Draw, write down. Write down your ideas. Make marks, diagrams. Draw a sketch, a sketch. What and how to do? How to present?

Complete the task. Follow your own plan clearly.

Present. Present your idea or the result of your own creative activity (song, poem, drawing, project, etc.)

The next type of methods is creative and productive. They summarize the studied material, reflect the quality and level of specific knowledge, skills and abilities acquired in the lessons. These methods include: "Art demonstration" (presentation of creative works, projects, tasks, etc.), "Creative control" (control and generalization of thematic knowledge in the final lessons, developed in a non-standard, bright form of questions and answers.

Creative learning methods are effective, including those that are intuitive in the traditional sense: "brainstorming", empathy, etc. They are based on illogical actions of students, designed to form in them the ability to express opinions outside of the template, to prove, to convince of the correctness of ideas. It is impossible to imagine a child's thinking without a fairy tale, vivid, bright, which is assimilated by consciousness and feelings, which is a certain step of human thinking. Students can make up fairy tales, they really like it.

In pedagogy, the most frequently used creative methods are:

- method of invention creation of a product previously unknown to students based on the results of specific mental actions;
- o "If" method students are invited to describe and draw a picture of what will happen if something changes in the world;
- method of visual representation reflects the state of assimilation of the studied object by the student, it seems to connect, its integral, indivisible vision takes place;
- method of hyperonization increases or decreases the object of knowledge, its separate parts
 or properties;
 - @agglutination method students are invited to combine incompatible real qualities,

properties, parts of an object and images, for example, hot snow, sweet salt, etc.;

- o innovative technologies (game technologies; critical thinking; differentiated learning; developmental learning, information and communication technologies);
- interactive methods and techniques: joint learning technologies; collective and group activity; situational modeling; preparation of questions for discussion;
 - o project method;
 - o logical tasks, crosswords, puzzles;
- methods of psychological and pedagogical support of students' activities encouragement, creation of clear visualizations, visual images - cognitive game, creation of a situation of success, encouragement to find alternative solutions, performance of creative tasks, creation of mutual assistance situations, painting (drawing, sculpting, application);
 - musical activity (perception of music, games, dances);
- @ artistic and speech activity (listening to fairy tales, stories, reading poems, creating one's own works);
 - theatrical activity (enactment of fairy tales) (Derkach, 2018).

Summarizing the above, it should be noted that the use of the specified methods in the process of extracurricular work will ensure the deepening of the emotional sensitivity of younger schoolchildren, reveal the creative potential of each student, and help in the development of creativity.

5. CONCLUSIONS

Therefore, we can conclude that extracurricular work has great opportunities for the development of creative thinking of primary school students, the effectiveness of this activity directly relates to the quality of the implementation of pedagogical conditions and teaching methods, which are components of the model for the development of primary school students' creative thinking in the process of extracurricular work.

Within the framework of the implementation of this model, the task of the teacher is to manage the processes of creative search (from simple to complex): creating a situation of primary school students' creative activity, developing imagination, associative thinking, the ability to understand regularities, the desire to constantly improve, to solve increasingly complex creative tasks.

The conducted research does not cover all aspects of solving this problem. Features of the development of creative thinking in the process of extracurricular work of primary school students with special needs require further development.

REFERENCES

- [1] A Large Explanatory Dictionary of the Ukrainian Language. (n.d.). In National Library of Ukraine named after V. I. Vernadskyi. http://irbis-nbuv.gov.ua/ulib/item/UKR0000989 (in Ukr.)
- Bukharieva, O. (2012). An Extracurricular activity as an engine of moral development of a student's personality. World Literature in Modern School, (11-12), 27–29. (in Ukr.)
- [3] Derkach, M. (2018, August 3). Development of Creative Thinking of Younger Schoolchildren. Vseosvita. http://surl.li/gdkyi (in Ukr.)
- [4] Humeniuk, T. B. (n.d.). Modeling in pedagogical activity. Scientific Journal of the M. P. Drahomanov NPU. Series 13: Problems of Labor and Professional Training, 66–72. http://surl.li/gdkyl (in Ukr.)
- [5] Khymynets, V. V., & Kiryk, M. Iu. (2012). Innovations in Primary School. (in Ukr.)
- [6] Klymenko, V. V. (2002). Psychological support of the student's creativity. Psychologist, (46–47), 17-23. (in Ukr.)

- [7] Pavlenko, V. V. (2015). Development of creativity of younger schoolchildren as a pedagogical problem. *Problems of Education*, (85), 152-158. (in Ukr.)
- [8] Yarmachenko, M. D. (Ed.). (2001). Pedagogical Dictionary. (in Ukr.)

Oksana Bilier, PhD of Pedagogical Sciences, Senior Lecturer of the Chair of Preschool and Primary Education, Sumy State Pedagogical University named after A. S. Makarenko, Sumy, Ukraine;

ORCID ID: 0000-0001-9969-3289

Olha Vasko, PhD of Pedagogical Sciences, Associate Professor, Associate Professor of the Chair of Preschool and Primary Education, Sumy State Pedagogical University named after A. S. Makarenko, Sumy, Ukraine.

ORCID ID: 0000-0001-5241-0958

Address: Oksana Bilier, Olha Vasko, Sumy State Pedagogical University named after A. S. Makarenko, 87, Romenska Str., Sumy, 40002, Ukraine.

E-mail: flocksfour@ukr.net, vasko.olga@gmail.com

Received: December 15, 2022; revised: February 6, 2023; accepted: March 13, 2023; published: April 03, 2023.

Білер Оксана, Васько Ольга. Модель розвитку креативного мислення учнів початкових класів у процесі позакласної роботи. *Журнал Прикарпатського університету імені Василя Стефаника*, **10** (1) (2023), 144–151.

У статті розглянуто можливості моделювання на основі яких теоретично обгрунтовано та розроблено модель розвитку креативного мислення учнів початкових класів у процесі позакласної роботи, що має три складові. Перша складова – це компоненти креативного мислення, а саме: творча уява, уміння говорити нове та асоціативно-образне мислення. Друга складова – це методи розвитку креативного мислення, у межах дослідження ними були визначені: навчально-розвивальні методи, мотиваційні методи та творчо-результативні методи. Третя складова – це педагогічні умови реалізації розвитку творчого мислення. До педагогічних умов було віднесено: активізацію творчої діяльності, що реалізується через активізацію мислення, творчої уяви, спостережливості кожного учня; надання вчителем свободи дій для прояву своїх творчих здібностей під час виконання завдань, спрямованих на розвиток креативності; введення ігрових моментів, що умотивовують творчу діяльність учнів, дають можливість реалізуватися в більш сприятливій, психологічно позитивній атмосфері; уміння викликати в учнів почуття задоволення і радості від успіху, розвиток креативності; створення артпростору, а саме класного кабінету, релаксаційних арт-куточків, майстерні за інтересами, галереї учнівської творчості тощо; використання інноваційних технологій у процесі позакласної роботи, до прикладу проєктна діяльність.

Визначено, що відповідно до охарактеризованих педагогічних умов доцільним є застосування певних груп методів, а саме: навчально-розвивальних, що мають на меті виявлення творчого потенціалу школярів та націлення його впливу на формування структурних компонентів креативності; мотиваційних, що мають зацікавити учнів процесом пізнання нового, невідомого, актуалізувати опорні знань, сприяють активній творчості у процесі позакласної роботи; творчорезультативних, що узагальнюють вивчений матеріал, віддзеркалюють якість і рівень специфічних знань, умінь і навичок, набутих на уроках; методи креативного навчання, до яких належать ті, що в традиційному розумінні є інтуїтивними: «мозкового штурму», емпатії тощо.

Доведено, що у межах реалізації цієї моделі завданням педагога є управління процесами творчого пошуку: створення ситуації творчої активності учнів початкових класів, розвиток їх уяви, асоціативного мислення, здатності розуміти закономірності, прагнення постійно вдосконалюватися, розв'язувати дедалі складніші творчі завдання.

Ключові слова: модель, розвиток, креативність, мислення, учні початкових класів.