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**THE CURRENT STATE OF CREATIVE THINKING'S DEVELOPMENT OF
PRIMARY SCHOOL STUDENTS****СУЧАСНИЙ СТАН РОЗВИТКУ КРЕАТИВНОГО МИСЛЕННЯ УЧНІВ
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Abstract The article examines the analyzed views of scientists on the concept of creativity, defines the main characteristics of students' creative thinking and ways of their formation. The authors considered effective methods and techniques for the creative thinking's development of primary school students in the conditions of the New Ukrainian School.

Key words: creativity, creative thinking, development, primary school students, primary school teachers, New Ukrainian School.

Introduction.

Primary education is a fundamental element of the Ukrainian educational system, because it lays down the basic competencies of modern society. Undoubtedly, the foundation of personality formation and development is formed in primary school age. Modern challenges and the rapid development of the world determine the need to modernize primary education into a holistic, scientifically based and variable flexible system capable of forming a worthy personality of the Ukrainian community.

L. Hrynevych [8], notes that this «must be a school for life in the 21st century. You see how technology is changing, how society is developing, right now we can't know exactly what will be needed and what challenges will be faced by the children who are currently in school». It becomes clear the need to move from isolated knowledge and skills to the formation of competencies and cross-cutting skills. The Law on Education (Ukraine) [4], the National Doctrine of the Development of Education of Ukraine in the 21st Century [7], industry standards of higher education state are says that education should, among other things, ensure the development of students' creativity, skills of independent creative search, self-education and self-realization. Accordingly, students' creative thinking becomes one of the main cross-cutting skills that must be formed and serves as an indicator of the provision of quality educational services, because it is the ability to generate new ideas, perceive problems from different points of view and find non-standard solutions. The above



allows us to come to a conclusion about the relevance of research on the development of creative thinking in primary school students as a key to the formation of a specialist of the 21st century.

Main text.

The problem of the creativity's development has repeatedly come into the scientific interests' focus of domestic scientists. For example, the scientist L. Zasekin [4] investigates the problems of developing creativity and creative thinking of primary school students. V. Panok [1], conducts research on the development of creative thinking and creative abilities of primary school students. The scientist L. Koroleva [6] also works in the same field, researching the problems of creativity development of elementary school students, studying methods and approaches to the development of creative thinking in education. V. Pavlenko [9], develops methods and approaches to the development of children's creative abilities. I. Stanislavchuk [12], in a study of the possibilities of developing the creativity of younger schoolchildren in educational activities, found that the use of innovative technologies contributes to the development of creative thinking of primary school students. Other researchers, such as R. Crawford, K. Burns and S. Lubart and others, also conducted research in the field of development of creative thinking of children 6-10 years old. Of course, this is not a complete list of scientists who research the issue of the development of creative thinking of elementary school students in Ukraine, but it gives a general idea of the relevance and prospects of this scientific direction.

The purpose of this work is to consider the concept of creativity, the main characteristics of students' creative thinking, as well as methods and techniques for the development of creative thinking of primary school students in the conditions of the New Ukrainian School.

In the Ukraine State Standard of Primary Education [2], it is stated that it is not enough for a modern graduate of the primary level of the New Ukrainian School to have only knowledge, it is necessary to be able to use it in life. Knowledge and skills interrelated with the student's value attitudes form his life competencies necessary for successful self-realization in life, study and work.

In the context of the research, the interpretation of the phenomenon of «creative thinking» according to J. Gilford [14], who first proved that this concept is holistic, intuitive and relative, is of interest. Creative thinking is defined by him as «a type of thinking that goes in different directions». This way of thinking allows for different ways of solving the problem, leads to unexpected conclusions and results. Creative thinking is based on imagination and involves the possibility of several answers to one question, which is a condition for creating non-standard solutions and self-expression of the individual.

Valuable is the definition of V. Sukhomlynskyi, who noted that «creative thinking is the result of the interaction of the mind and the stimuli of the surrounding world» [13]. We consider significant the position of E. Torrens [15] regarding the consideration of creative thinking as the emergence of sensitivity to problems related to a lack of knowledge, identification of difficulties, the process of the emergence of guesses and the formation of hypotheses.

Exploring the features of the creative thinking's development N. Bibikova [1]



thinks that the period of education in primary school is the most sensitive period in the formation of creativity, since it is at this age that neoplasms are formed that affect the creative success of the child in the future. These neoplasms can include such properties of the psyche as the cultivation of curiosity and observation, the development of fantasy and imagination, creative thinking, the formation of the ability to analyze environmental phenomena, the ability to compare, generalize facts, draw conclusions, practically evaluate activity, activity, one's own initiative.

The main characteristics of creative thinking are the novelty of the learned product, the originality of obtaining new knowledge [12]. For the development of which it is necessary: to form tasks of divergent and convergent type (tasks of divergent type should not only be presented evenly, but also dominate in some disciplines); implement the developmental possibilities of educational material; combine the development of productive thinking with the skills of its practical use; to provide research practice, not just the performance of reproductive tasks; focus on students' manifestations of independence when solving various tasks, their desire to find an original, alternative solution; rejection of conformism, exclusion of all points requiring conformist decisions; to form abilities for criticality and loyalty in evaluating ideas; strive for the most in-depth study of the problem; to individualize the educational process, that is, to create conditions for the full manifestation and development of specific personal functions of the subjects of the educational process; to present students with problematic situations [14].

The formation of such generalized methods of mental activity is extremely important, as it provides an opportunity to transfer students' knowledge to relatively new conditions. Accordingly, the main principle of the development of creative thinking is the special formation of generalized methods of mental activity. There are two large groups of generalized methods of mental activity - algorithmic and heuristic [12].

Algorithmic methods include methods of correct, rational thinking that fully comply with the laws of formal logic; which, in turn, provides an error-free solution to a wide range of problems for which these techniques were directly designed. Providing primary school students with quality tools, namely arming them with thinking techniques, teaching them to define concepts and classify them, will give a positive result in the formation of independent productive thinking. These methods are the baggage of knowledge from which the student receives «building material» for solving the tasks set before him.

Techniques of a different type were called heuristics in connection with the direct stimulation of the search for solutions to new problems and the discovery of new knowledge for students, and thus correspond to the specifics of creative thinking. Comparing techniques of heuristic and algorithmic types, we note that heuristics focus on substantive analysis of the problem, not formal-logical. These techniques include visual-figurative thinking in problem solving, which, unlike verbal-logical thinking, makes it possible to perceive the situation holistically.

Thus, algorithmic methods ensure the correct solution of types of problems known to students, serve as a background that can be used in the search for a solution to the given problem. Heuristic methods are used by students in times of uncertainty,



or when creating fundamentally new situations, thereby facilitating the solution of new problems. Therefore, the principles of the development of creative thinking include the special formation of both algorithmic and heuristic methods of mental activity.

It is worth noting that the scientific works of N. Komarova, K. Svirilina, and L. Pishchulina testify to the relationship between the teacher's creativity and the development of the creative abilities of primary school students. Based on this, K. Svirilina emphasizes that the teachers must be creative in organizing lessons and extracurricular activities, use developmental methods aimed at solving problems in a non-standard way, develop reflective and logical skills; to create a free creative environment for the development of students' imagination and motility, as well as the necessary organization of search activity, which is characterized by the presence of a strongly expressed heuristic element [11].

Valuable for our research is the position of the scientist L. Koroleva, who, considering the role of the teacher in the development of creativity of primary school students, singles out the game method as one that reveals the individual characteristics of each student. The scientist emphasizes that a conscious attitude to the educational process affects the development of creative imagination. «In the educational process, the primary school students are able to carry out various creative searches, mobilize their knowledge, impressions received from various sources, including the media and the Internet. From the depiction of individual actions, the appearance of the hero, they move to conveying his feelings, the nature and depth of relationships, the public meaning of activity» [6].

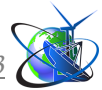
Accordingly, in order to form the creative thinking of primary school students, the activity of the teacher should also be creative. That is, to include non-standard decision-making, and the use of non-traditional ways and methods of solving the problem, as well as predicting its consequences. During the development of creative thinking of primary school students, it is important not so much to include them in creative activity, but to provide «samples of creative activity» [10].

Under the condition of changing activities, skillful management of the educational process, the development of creative abilities of students will increase many times. In this connection, it will be appropriate to cite the opinion of J. Comenius [5], who emphasized that «the teacher is an assistant to nature, not its owner, its builder, not a reformer», therefore he himself chooses forms, methods and techniques, which contribute to the development of students' natural inclinations.

In order for the development of creative thinking during lessons to be the most effective, it is necessary to use active forms, methods and means of learning, as well as take into account the individual age characteristics of primary school students.

Next, we will consider the most effective of them, which was developed by E. de Bono. The scientist considered creativity as a characteristic of a self-organizing information system, and believed that, given the specifics of the work of the left and right hemispheres, it is extremely difficult for a student to harmonize their joint activity.

The method of E. de Bono [9] «Six hats of thinking» is built on the principle of role-playing games and involves the organization of productive educational



activities that focus on understanding and understanding one problem. Wearing a hat of the appropriate colour, a primary school student takes on a role and must consider a problem from a certain point of view. In such a situation, the student's automatic thinking becomes conscious.

E. de Bono in his scientific work focuses on the differences between reactive and conscious thinking, explaining it by the fact that when a person drives a car, he has to choose a road, at the same time adhere to a given direction and monitor the movement of other vehicles. She performs a lot of quick actions conditioned by past or future experience. Monitors signals and immediately reacts to them. «This is reactive (reactive) thinking. Everyday thinking can be compared to driving a car, when a decision is made based on road signs, but without drawing a map. We use a different type of thinking to study the subject and make a plan, and this requires an objective and neutral attitude. To draw up a plan, it is necessary to look more broadly, which is significantly different from simply reacting to road signs as they appear» [16].

The «Six Hats of Thinking» method is aimed at organizing thinking, working with information, developing creative thinking, turning to the intuitive sphere, generating creative ideas, and developing logical abilities and skills.

The use of this method will help in overcoming unnecessary emotions, helplessness in solving educational tasks, confusion in choosing a position and arguing one's own view of the situation. This method is based on the idea of parallel thinking. The basis of traditional thinking is polemic, discussion and clash of opinions. However, with such a schedule, the winner is not the best decision, but the one that was more successfully implemented during the discussion. Parallel thinking is constructive, in which different views and approaches coexist rather than conflict.

It is clear that if a person tries to think about solving a practical problem or task, he faces certain difficulties. First, she is often not inclined to think the decision through at all, instead confining herself to an emotional reaction that determines her subsequent behaviour. Secondly, he feels insecure, not knowing where to start and what to do. Thirdly, she tries to keep in her head all the information related to the task at the same time, to be creative, constructive, logical, to make sure that her interlocutors are logical and so on, and all this, of course, causes nothing but confusion [9]. This method is universal and adapted to the age of elementary school students, provides opportunities to generate new ideas, free from thought patterns.

Briefly describe the purpose and role of each hat in the formation of creative thinking. White Hat: Focuses on facts and information that is already known and aims to teach elementary students how to gather relevant information and analyze data. The red hat is the emotion hat, teaches students to express feelings and show intuition. The yellow hat is a positive thinking hat that helps you find advantages and opportunities. It is used to stimulate creativity and imagination of primary school students. The black hat is a negative thinking hat that helps highlight flaws and problems. Having mastered it, primary school students will learn to analyze risks and anticipate shortcomings. The green hat is a creative thinking hat that helps you generate new ideas and concepts. When working with elementary school students, it is used to stimulate creativity and innovation. The blue hat is the thought process



leader's hat that helps guide the discussion and draw conclusions. It is used for planning and organizing the discussion [9].

E. de Bono argued: «That people who are obsessed with solving problems tend to overestimate critical thinking. They better understand what can be wrong, but they are not always able to suggest what can be more effective»; «Completion is the moment when you are tired of thinking»; «Taking on the role of a thinker, you necessarily become one» [9].

Based on a specific task, primary school students should learn to see the sequence of putting on hats. However, there is also a prohibition, namely wearing two hats at the same time in order to avoid disharmony and loss of self-control. It should also be ensured that students do not wear hats of the same colour for a long time. Thus, we note that using the method of E. de Bono, the primary school teacher will avoid the transition to the personality of the student, because not everyone wants to be in the center of attention. A person-oriented approach is being implemented in the organization of the educational process, in which the primary school student takes the role of a full-fledged partner in an atmosphere of cooperation. The «Six Hats of Thinking» method contributes to the creation of a creative atmosphere, the disappearance of stiffness in the student's decisions, and a sense of confidence appears. For a primary school teacher, this method acts as a transformer of mental activity into a more protected process of searching for the truth.

Conclusions.

In primary grades, students are at the stage of active development of their personality and formation of their thinking processes. Developing creative thinking from the primary grades can help students find more effective ways to solve problems, develop their intellectual and creative abilities, and ensure their future success. Because, firstly, the educational process directly affects the development of creative thinking; lower school age is favourable for the formation of primary creative skills; the formation of creative abilities should take place in the process of studying all school disciplines without exception. Secondly, relying on the age characteristics of younger schoolchildren is a primary condition for the effective development of creative thinking.

The teacher can apply various methods and exercises for the development of creative thinking in children, for example, offer an invention task, a problem task, a constructive game, building creative projects, etc. Such exercises will help children develop their imagination, fantasy and help strengthen their sense of independence.

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Анотація. У статті розглянуто на проаналізовані погляди науковців на поняття креативності, визначені основні характеристики креативного мислення учнів та шляхи їх формування. Авторами розглянуто дієві методи та прийоми розвитку креативного мислення учнів початкових класів в умовах Нової української школи.

Ключові слова: креативність, креативне мислення, розвиток, учні початкових класів, вчителі початкової школи, Нова українська школа.