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Research Article

DESCRIPTION AND ANALYSIS OF PEDAGOGICAL-PSYCHOLOGICAL COGNITIVE ACTIVITY AND RELATED CONCEPTS

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ABSTRACT

This article discusses the importance of cognitive activity in preschool education in modern conditions, the pedagogical and psychological description of cognitive activity and related concepts, as well as the contextual analysis of these concepts.

KEYWORDS

Cognitive activity, educator, cognitive ability, cognitive style, cognitive interest, mental maturity, creativity, communicativeness.

INTRODUCTION

It is well known that in scientific sources, in addition to cognitive activity, the term cognitive ability is also widely used. Cognitive ability is the main activity of children, it is of great importance for determining the intellectual development of the child, his knowledge of the environment, the being. Abilities are individual psychological characteristics of a person that ensure their manifestation in scientific, practical and creative activities, as well as the success of its implementation. At the modern stage of development of pedagogy and psychology, cognitive abilities are understood as a combination of a child's intellectual and emotional

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abilities. Cognitive ability ensures the success of any cognitive activity. That is, cognitive (cognitive) abilities are individual characteristics of a person that develop under the influence of conditions and factors, focused on knowing the world around them.

Gardner divides the concept of cognitive ability into seven groups using interdisciplinary research.

Table 1

Types of cognitive abilities according to Gardner

№	Cognitive ability	Description
1	(logical-mathematical)	It is the ability to think deductively and logically in solving problems, situations and tasks, and this ability is related to scientific and mathematical thinking.
2	(linguistic)	This ability implies the effective use of all the possibilities of language as a means of communication.
3	(visual/spatial)	The ability to create mental images to solve problems is understood. This ability is not limited to the visual realms. Blind children also have this ability.
4	(musical intelligences)	This ability includes the ability to recognize musical sounds, rhythms, and tones.
5	(bodily-kinesthetic)	It is the adaptation of physical movements through mental ability, which refutes the idea that mental and physical activity are not interrelated.
6	(individual)	It is understood that he and others understand and evaluate their feelings, desires and goals and take into account different characteristics (age, ethnicity, gender…).
7	(naturalistic)	The ability to recognize the environment, natural creatures, to feel and comprehend the features of the natural world.

Although the above abilities are separated from each other in content and essence, Gardner points out that they are rarely observed separately. In the process of children's development, it is observed that several cognitive abilities are used together at the same time.

The term "cognitive style" is used in psychological sources to mean "cognitive style" in English. However, the concepts of "knowing" and "cognitive" are not synonymous. "Cognition refers to the process of reflecting objective reality in the mind, which is the image of cognition in the form of sensory, perceptual, mnemonic, thinking. The concept of cognition refers to the psychological mechanism of information processing involved in the formation of different levels of cognitive images. Simply put, it's a unique way of studying existence. "

MATERIALS AND METHODS

In the process of education, children are given the same education by the educator. But children's mastery and acceptance of learning activities are different. The concept of cognitive style is formed on the borderline of personality psychology and cognitive psychology. With the addition of the word style, it had a distinctive character. In personality psychology, style is defined as the highest level of individuality, while in cognitive psychology, it is recognized that it is not related to a low or high level of mental development, emphasizing the formal nature of intellectual activity.

Mental maturity is a set of quantitative and qualitative changes that occur in a child's mental activity under

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the influence of educational work with increasing age and experience. In preschool children, knowledge is rapidly enriched, speech is formed, and cognitive processes improve. Thus, the child learns the simplest methods of mental activity. Ensuring the mental development of preschool children is of great importance to them for their entire future activities.

The cognitive interest of preschool children is related to the world, the environment. The choice of the content of the study material with deep thought, the inculcation of concepts specific to scientific knowledge, forms an interest in learning. According to TM Golovastikova, first of all, such educational materials arouse interest and strengthen, amaze children with unknown things, expand their imagination. Surprise is a key element of motivation for perception. The state of surprise of children is the state of striving to learn new things, the state of expecting new things.

It is not always possible to enrich a training session with information that arouses cognitive interest. For a lesson to be fun, it must contain information that is partly new and partly familiar to the children. New information appears in the background of familiar data. Therefore, in order to maintain the continuity of cognitive interest, attention should be paid to the ability of children to search for new information through familiar information. This leads children to realize that they have the opportunity to learn simple, repetitive phenomena of the environment outside of school. The new information increases cognitive interest by repeating previously familiar information, explaining other aspects as well. It is also necessary to move from the daily life of children, their thoughts about the environment (everyday knowledge) to the level of understanding scientific concepts, generalizations and laws (scientific knowledge).

RESULTS AND DISCUSSION

In her research, AE Krasilnikova analyzes cognitive interest by dividing it into three levels:

Table 2

Levels of cognitive interest and their description

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High	Medium	lower
High level of cognitive interest (creative activity)	Cognitive interest systematically supported by the educator (executive activity)	Cognitive inertia (reproductive-imitation activity)
An interest in identifying events and processes, the connections and regularities between them. Striving to find answers to complex questions	Interest in searching for information based on evidence and descriptions. Understanding the essence with the help of the educator	Only episodic interest in the attractive aspects of events and happenings, lack of general interest
The process of independent activity is organized with intensity and interest	Independent activity is based on the situation and the presence of motivation	Independent activity is carried out in a "fake" form (copying from the board or others, duplicating the activities of others without understanding) through regular distractions
Overcome all difficulties in learning	Overcoming difficulties with the help of others and expecting help from others	Complete inactivity in adversity.
He also spends his free time studying	Episodic (partial) dealing with the field of interest	Lack of propensity for an activity

This table serves as an important database for the educator to determine the level of cognitive interest of preschool children in the targeted preparation of children for school. Determination of cognitive interest is determined by pedagogical methods such as observation, conversation, comparison, analysis, generalization.

AK Markova shows that the manifestation of cognitive activity depends on cognitive motives. Cognitive motives are divided into three types: broad cognitive motives (new knowledge, evidence, events and situations), learning cognitive motives (methods of acquiring knowledge, focus on mastering) and self-development motives (focused on gaining additional knowledge, self-improvement).

MD Vinogradov and IB Pervin noted that team cognitive activity plays an important role in the development of cognitive activity in children. Through this, children are encouraged to be creative, imaginative and independent. By teaching children to work in a team, they develop the ability to communicate, listen to others with patience and respect, and express constructive opinions. Teaching mutual respect, attentiveness, a positive attitude to learning new knowledge and respecting individual interests in learning groups are important components of collective cognitive activity. Collective cognitive activity is a priority in preparing children for school.

Some pedagogical research argues that not all teaching methods have cognitive developmental

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properties. Cognitive activity is carried out by children only when they are able to engage in self-activity. Cognitive activity is determined by the attitude to the knowledge being studied, i.e., the subjective position. Children are not only the object of learning but also the subject of learning. Children not only meet the requirements of the educator, but also make internal adaptations in accordance with their personal experience, level of mental development, actively assimilate and process new knowledge.

TI Shamova, who conducted research on the quality of cognitive activity, said: "In the educational process, not only the state of activity of students, but also the quality of this state is important, which is reflected in their attitude to the content of education, the nature of activity and aspirations. Learners are involved in achieving their cognitive goals through their voluntary efforts. " Through this we can see that two aspects of cognitive activity are highlighted:

1. Psychological aspects of cognitive activity (activity status, quality of this activity).
2. Social aspects of cognitive activity (personality of the learner, his attitude to the content and nature of activity) are also reflected.

Through these two aspects, it will be possible to identify the means of activating cognitive activity: interest, motivation, volitional qualities (desire to mobilize one's own moral and volitional efforts) and the specific location of the application of these efforts (learning and cognitive achievement).

The real possibilities and effectiveness of cognitive development in preparing preschool children for school through the development of cognitive activity in preschool organizations are manifested when their content corresponds to the psychological characteristics of the child, as well as the abilities formed on its basis. This includes components such as children's learning and cognitive needs, motivations, educational task, appropriate actions and operations.

Interests are a necessary psychological condition for the emergence of children's need for the environment, the acquisition of various knowledge. In the process of shaping the need for cognitive activity in preschool children, it is shaped and defined by a variety of motives. The implementation of this method of assimilation implies a separate activation of cognitive activity. Assimilation manifests itself as an integral part of the adaptation process. It stems from a specific event based on the composition of children's cognitive activity. In any adaptation and coordination, assimilation is inseparable from accommodation. In the early stages of the development of any mode of mental activity, there is a correlation between the tendencies of assimilation and accommodation.

The educator-educator relies on the existing knowledge of the children in explaining the new topic and is based on a separate explanation, distinguishing the basic concepts. Pedagogical reality shows that if learners are cognitively active, the learning process is effective and does not pose organizational complexity. This is stated in pedagogical theory as the principle of "active and independent learning of students." The independence of learners is manifested in their "individuality, ability, activity, ability to concentrate, to use all their strength to achieve the set goal."

Studies show that the problem of shaping cognitive activity at the level of age characteristics is inextricably linked with the study of ways of shaping cognitive activity motivation and interests. Cognitive activity can be seen as a manifestation of all areas of children's development. These include interest in new

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knowledge, the pursuit of success, the positive impact of learning on emotions, the recognition of personal "I", the development of confidence in solving various problems, a sense of pride in what they have learned so far in learning complex topics, and more.

In preparing children for primary school, the preparation of them for a new position, a new position in society, learning is an important motive. Of course, these are external motives, and these motives themselves do not remain as motives for a long time. Therefore, it is necessary to awaken the motives that lie in the learning process in preschool education institutions. Gaining children's interest in learning, developing an active attitude to learning, of course, happens in the learning process. Exercises that match children's potentials and abilities lead to increased interest. Fundamental research, various experiments, problem situations, games reveal the process of developing children's cognitive activity. Active learning, the content and essence of cognitive activity encourages children to take a strategic approach to learning and develops initiative, logical thinking.

Cognitive activity is a complex pedagogical and psychological phenomenon. According to SM Vishnyakov, cognitive activity is the quality of a student's learning activities, his attitude to the content and process of education, the desire to effectively acquire knowledge and skills, the ability to mobilize spiritual and volitional efforts to achieve goals and aesthetic pleasure.

L.L.Timofeeva noted that "not all the information in the training material can be interesting, but the most important thing is that the cognitive activity makes the learning process interesting." In order to arouse in children a desire to learn, it is necessary to develop their need to engage in cognitive activities. Through this, children learn to find interesting aspects in the process itself.

Cognitive development in children is manifested not only in learning, but also in independent learning based on subjective experience. This is reflected not only in the mastery of the content set out in the educational and normative documents, but also in the objective and social values, the application of the acquired knowledge in practice and the expression of their attitudes, as well as in educational dialogue. Unsuccessful communication between the educator and the children becomes a monologue of the educator-educator. This leads to children becoming bored and alienated from the learning process. From this it can be said that the cognitive development of children is based on constant communication.

In our opinion, it is necessary to distinguish between the concepts of “cognitive activity” and “mental activity”. Mental activity describes mental operations, a certain level of cognition, and it is the result of cognitive activity. There is also a “learning activity” that involves the process of acquiring knowledge.

Games, game elements, unexpected actions in the formation and development of cognitive activity increase the sense of wonder in children and arouse great interest in the learning process. Through play, children's abilities and talents are revealed in a complete and unexpected way. Play is a specially organized activity that requires emotional and mental activity. Decision making is understood as a general description of the game. The children ask themselves, "What should I do?", "What should I say?", "How can I win?" asks questions and makes his own decision. This leads to the intensification of children's problem management, thinking activity. Play is a specially organized activity that requires you to perform certain operations emotionally and mentally. Another

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important aspect of play is that it can have a significant impact by giving inactive children a specific role or task in order to support them. Play activities develop children's social and communicative competencies. Board games, word games, quizzes, dominoes, simulators, chess, checkers, various puzzles are widely used in the range of games focused on cognitive activity. Games will focus on repetition, reinforcement of certain cognitive activities.

Games are divided into didactic, educational, activity-developing and socializing types according to their purpose. The didactic purpose of the games is to increase children's knowledge, the application and development of knowledge, skills, abilities in cognitive and practical activities, the development of work skills. Educationally, the games will be aimed at fostering children's individuality, independence, willpower, cooperation in the formation of different approaches, attitudes, spiritual, aesthetic and worldview, the ability to integrate into the community, communication. Games that develop cognitive activity focus on developing attention, memory, speech, thinking, comparison skills, comparison, finding similarities, hypothesis, imagination, creative ability, empathy, reflection, finding the optimal solution, motivating learning activities.

CONCLUSION

Mastering new, perfect types of cognitive activity increases cognitive interest. Problem-based learning is used for this very purpose. In preschool children, the activation of cognitive activity intensifies their thinking through the creation of problem situations, the acquisition of cognitive interests, creativity, modeling. Problem-based learning involves contradictions, unexpected situations. Problem-based learning provides not only ready-made evidence and conclusions that are suitable for memorization, but also evidence and conclusions through a thorough study of various problems, development of options for finding solutions, making and evaluating their own plans and decisions, discussion, collaboration.

Successful learning situations play an important role in the development of cognitive activity in preschool children. When children are encouraged and recognized when they succeed, they set the direction for their own development, increase their emotional self-confidence, and increase their “positive energy resources”.

From the above considerations, it can be said that the search for effective ways to increase the cognitive activity of preschool children is one of the issues that has not lost its relevance in pedagogical practice. Cognitive activity reflects the constant need of school-age children to acquire new knowledge, skills and competencies, to understand their expediency, to increase and expand the amount of knowledge, thereby exploring different learning strategies.

REFERENCES

1. Виноградова М.Д., Первин И.Б.Коллективная познавательная деятельность и воспитание школьников. – М.: Просвещение, 1977. – С. 23.
2. Вишнякова С.М. Профессиональное образование: Словарь. Ключевые понятия, термины, актуальная лексика.– Москва: НМЦ СПО, 1999. – 538 с.
3. Головастикова Т.М. Как сделать учение увлекательным? // Начальная школа. 2006, №2. – С. 30-34.
4. Красильникова А.Е. Познавательный интерес как психолого-педагогический феномен. Вестник, 2018.–41с.

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5. Leandro S. Almeida, Maria Dolores Prieto, Aristides I. Ferreira, Maria Rosario Bermejo, Mercedes Ferrando, Carmen Ferrándiz,Intelligence assessment: Gardner multiple intelligence theory as an alternative,Learning and Individual Differences,Volume 20, Issue 3,2010,Pages 225-230.
6. Маркова А.К., Орлов А.Б., Фридман Л.М. Мотивация учения и ее воспитание у школьников. –М.: Педагогика, 1993. – 63с.
7. Тимофеева Л.Л. Когда хочется учиться // Начальная школа.2007, №10. –С.41-46.
8. Pamela W. Garner, Badiyyah Waajid Emotion Knowledge and Self-Regulation as Predictors of Preschoolers' Cognitive Ability, Classroom Behavior, and Social Competence. JournalofPsychoeducationalAssessment. 30(4)., 2012. –P. 330-343.
9. Холодная М.А. Психология интеллекта. Порадокси исследования.– Санкт-Петербург: Питер, 2002.- С. 264
10. Шоумаров Г.Б. Дифференциалная психологическая диагностика задержки психологического развития на основе анализа стандартизированной методики: дисс… канд. Психол. Наук.– Москва.– С. 140.
11. Шамова Т.И. Управление образовательными системами. – Москва, Издательство «Перспектива»,2009.– 56с.
1. 12. Nodirbek Kodirov Mamasoliyevich. (2021). Current issues of formation of information culture in youth. https://doi.org/10.5281/zenodo.5770626
13. Mamasoliyevich, N. K. (2021). Current issues of formation of information culture in youth.