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ПСИХОЛОГІЯ

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THE APPLICATION OF PSYCHOLOGICAL AND PEDAGOGICAL METHODS IN THE FORMATION OF COGNITIVE SKILLS

Abstract. Since the beginning of the 20th century, world history has entered a new era of globalization. This has brought new qualitative and quantitative demands on the outcomes of human activity in education and various labor fields. In a rapidly changing environment where modern innovations replace one another, individuals face the necessity of understanding problematic situations and acquiring the necessary cognitive skills to address them. The answers to questions about how these skills are formed, how the cognitive structure inherent to the concepts of a "new human" and a "new personality" is developed and how to ensure effective, results-oriented cognitive activity lie within the emerging field of cognitive psychology. For this reason, current research in cognitive psychology, particularly studies on the formation of cognitive structures within educational environments at various stages of ontogenesis, holds special relevance. Applying these findings to the learning process is a priority. Since the beginning of the 21st century, another notable issue has emerged in this context. It has become evident that it is essential to create new pedagogical practices that integrate concepts such as "artificial intelligence", "computer metaphors" and "cognitive skills", proposed by cognitive psychology. Consequently, cognitive psychology has become a key discipline for studying changes in human psyche and addressing critical, yet unresolved, issues. One such issue is identifying the psychological and pedagogical conditions for forming learners' cognitive activity during the educational process. The new findings in this area can help identify the methods, tools and environmental standards required to organize conscious, results-oriented and effective activities among learners during the learning process. This would allow for a more efficient organization of

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cognitive activity. The acquisition of knowledge, skills and abilities by learners – the main subjects of the educational system occur during the learning process. Each problem related to this process is studied within the psychological activity of learners and educators. Therefore, addressing cognition in the learning process and, in modern approaches, exploring the cognitive domain and cognitive activity begins with identifying the connections and relationships between the psychopedagogical structure and other domains. Cognitive skills develop in parallel with adolescents' self-identification, their alignment with images close to their emotions, tendencies, desires and ultimately, their self-awareness. New skills emerge during adolescents' systematically, purposefully and methodically structured cognitive activity within the learning process. In other words, effective cognitive activity during learning helps adolescents achieve their life goals. Thus, there is a growing need to explore adolescents' cognitive activity within the learning process and the factors that stimulate it by referencing the activity approach, a critical direction in cognitive psychology. Adolescents' cognitive activity depends on the motivations driving it. It should not be regulated by random motivations. If learning activity is motivated by inner feelings, desires and emotions, difficulties may arise in completing the activity with willpower. To achieve positive results, adolescents' cognitive activity should align with their value-motivation domain and their needs for self-identification, self-development and self-affirmation, accompanied by emotional and volitional efforts from beginning to end. The research highlights this level of motivation as one of the crucial conditions that shape the psychological structure of cognitive activity. In pedagogical psychology, the issue of how adolescents' learning activities are motivated by needs and interests to acquire a cognitive nature is one of the topics requiring comprehensive study.

Keywords: cognitive activity; knowledge; skills; abilities; adolescent; modern approach; learning process.

INTRODUCTION / ВСТУП

Statement of the problem / Постановка проблеми. Since its inception, psychological science has set itself the goal of understanding and knowing man and the world. The problem of psychological foundations of cognitive activity of adolescents in the learning process that we are studying is one of the fundamental ones, constantly raising questions both in the educational process and in the subject of scientific psychology. Research conducted in this area shows that the

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roots of the problem go back to ancient times, to the history of philosophy, and remain relevant in the modern era.

No matter how distant its history, the period of scientific development of the problem is inextricably linked with the foundations of sociology and psychology, which emerged as independent sciences in the 19th century. Since the beginning of the 20th century, research devoted to the study of thinking and speech has expanded thanks to facts obtained in the field of sensations, perception and memory.

At the beginning of the 20th century, the first cognitive facts appeared in the field of educational psychology. E. Thorndike [16] explained the process of human learning. As a result of his research, E. Tolman [15] suggested the existence of "cognitive maps" in living beings with a higher nervous system. B. Lomov [14], P. Galperin [11], A. Leontiev [13], L. Vygotsky [10], P. Zinchenko [12] and others identified psychological patterns, features, structures and mechanisms of human activity. G. Asmolov [9] analyzed activity in more detail, considering it as a system of "process", "movement" and "operation". The role of attitude in activity was studied by D. Uznadze [17]. Since the mid-20th century, research on cognitive psychology has become even more relevant. Currently, cognitive activity is called "cognitive activity" and includes not only those mental operations that we know as "cognition", "intellect", "reason", but also other structural components of personality: motivation, interest, emotional-volitional sphere, creativity.

The formation and development of cognitive skills are the main conditions for a modern person to achieve success both in education and in a career. Cognitive skills are formed on the basis of a number of components: cognitive knowledge, abilities, cognitive style, cognitive interest, etc. Thanks to the cognitive skills that arise as a result of the interaction of these components, a person applies the acquired knowledge in practice. Until now, education has focused on “comprehensive understanding”, “good memory”, “deep thinking”, “intellectual abilities”, “mental abilities”, etc. Since these skills are considered the main goal of cognitive goals in educational documents, it follows that these skills are of a cognitive nature. In this case, the skills that are supposed to be formed in students in the learning process called “activity” are also “cognitive skills”.

Analysis of (major) recent research and publications / Аналіз (основних) останніх досліджень і публікацій. In educational psychology, the question of what needs and interests motivate the learning activity of adolescents and make it cognitive is one of the problems that requires comprehensive study. In studies devoted to the problems of self-awareness, self-identification, self-regulation and self-control of the adolescent personality, one

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can highlight the works of R. Aliyev [3], R. Dzhabbarov [2], M. Aliyev [4]. Modeling of cognitive activity in cognitive psychology was studied by N. Amosov [9].

In Azerbaijan, research in the field of studying the cognitive sphere was conducted by A. Bayramov [1], A. Gadirov [7] (thinking), A. Alizade [5] (imagination and creativity), A. Mamedov [8] (memory), and others. In recent years, A. Alizade [5] has further expanded his research in the field of applying cognitive knowledge in education ("feelings and cognition", "imagination", binomial fantasy", creativity, "gifted children", etc.) and developed a taxonomy of education.

AIM AND TASKS / МЕТА ТА ЗАВДАННЯ

The ***aim*** of the article is to determine the psychological foundations of the cognitive activity of adolescents in the learning process, identify the factors involved in its regulation, as well as the formation of positive qualitative and quantitative changes in cognitive activity by enhancing developmental effects.

The article is aimed at solving the following ***problems*** arising from the stated goal:

- conduct a theoretical analysis of cognitive activity, clarify the status of the problem in the literature, consider the history of the emergence and development of cognitive theories, interpret structural models of cognitive activity;
- develop a methodology for studying the problem of psychological foundations of adolescent cognitive activity in the learning process;
- study age-gender characteristics of the cognitive sphere of adolescents, as well as the influence of crisis changes on their cognitive activity;
- clarify the role of abilities and cognitive style in the learning activity of adolescents, as well as the socio-cultural conditions of cognitive development;
- identify the characteristics and emotional nature of the needs and interests that motivate the cognitive activity of adolescents, substantiate the role of the psycholinguistic system;
- explain the relationships between the taxonomies of cognitive goals, cognitive activity and cognitive skills;
- explain the use of a system of symbols, codes and signs in cognitive activity, as well as the practice of coordinating cognitive processes through visual aids;
- an experiment using taxonomies to the process of learning and developing cognitive skills through resolving problem situations and situations of dissonance;
- conduct psychometrics and correlation of the cognitive abilities of adolescents, determine a model for the development of cognitive activity of adolescents in the learning process.

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THEORETICAL FRAMEWORK / ТЕОРЕТИЧНІ ОСНОВИ

Currently, numerous methods, tools and technologies are used in the educational environment to ensure the cognitive activity of adolescents in the educational process. Their scope of application is wide, and the content is rich. We consider it appropriate to highlight and explain in the article the methods to which we paid more detailed attention. The methods we considered were used in various situations during experimental studies.

Method of program-modular training. The method of programmed training involves planning, organizing and monitoring the cognitive activity of adolescents using various programs, as well as evaluating the results obtained. In programmed training, students use electronic textbooks, computer programs, etc. They independently acquire knowledge and skills in accordance with their cognitive style, using special training tools.

Active and intensive learning methods. This method ensures the organization of learning in a short time. With the help of learning methods, the perception, processing, memorization and application of information are activated, and ultimately the cognitive sphere. Activation and intensification of learning is also carried out by penetrating into emotions and the subconscious.

Method of implementing accessible constructions. To study the constructs available to adolescents, we studied the content of the constructs that were easy and difficult for the subjects to learn. We suggested specifying the characteristics of the easy and difficult tasks offered to the subjects. The first functions that came to mind were the most accessible to the adolescents. A week later, they took part in another study. This time, the descriptions were given using ideographic examples. Some of the actions given in the ideographic descriptions referred to constructs that the subjects used constantly.

Method of operations on concepts. Scientific knowledge is reflected in concepts. Knowledge on various subjects is considered as mastering the basics of science. In order to understand their essence and become more familiar with their content, it is necessary to know the meaning of each concept. Using this method, we taught students who were tested in mathematics, natural sciences, the Azerbaijani language, the history of Azerbaijan and geography to study the origins of scientific concepts. This work was created in the course of several operations.

1) concept recognition: determining what area of knowledge it belongs to (triangle – geometry, man – knowledge of the world);

2) definition of the concept: assigning it to the genus and type of objects, explaining its main features and properties (predicate – a member of a sentence, a multidirectional measure of climate and weather conditions, war – a historical event);

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3) description of the area of knowledge to which the concept belongs (planets of the solar system, plant species, living beings with a higher nervous system, grammatical structure of language, geography of countries);

4) comparison of the concept with other similar concepts (grammar-orthoepy: both are rules of language, continent-mainland: both are areas of land, century-era: both are stages of human history, quantity-measure: both are quantitative units of measurement);

5) application of the concept in practice (task – the meaning of the lesson, rain – a warning about how to act, moral code of a schoolchild – rules of conduct at school).

Such activities contributed to the development of conceptual scientific thinking in the subjects, and exercises with concepts contributed to their assimilation and use in cognitive operations.

Coding and modeling method. The coding and modeling method are an algorithm, a set of didactic tools, methods and techniques for controlling the cognitive actions of test subjects using certain symbols. The consistent use of coding and modeling operations based on didactically competently developed programs forms high-level learning skills in test subjects and creates opportunities for independent work with text, calculations, maps, diagrams, tables and graphs. This method is effective in solving the following problems:

a) ensure that knowledge is acquired in a specific and more effective way;

b) develop the cognitive abilities of subjects;

c) stimulate their cognitive activity;

d) create a basis for automated learning.

Algorithm solution method. "Algorithm" is also one of the important operations in cognitive activity. In didactics, an algorithm is a diagram showing the sequence of practical actions for solving certain problems. The algorithm, which we know from learning theories, is also widely used in pedagogical practice. It is more suitable for programmed learning. In our article, algorithms were used by teenagers as clearly defined rules for solving problems of the same nature, as a set of instructions for their procedural description, or as assignments [11].

Ideographic method of image. This method was also used to develop programming and modeling skills in adolescents. With the help of ideograms, adolescents can actualize their inner desires and potential, transmit subconscious information and free themselves from some of the suppressed negative thoughts. The use of idiographic procedures ensures that the study will be interesting and successful. In particular, the interest of adolescents was aroused by the presentation of descriptions, modeling and coding through idiographic examples [19].

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Intelligent imitation. In cognitive psychology, intelligent imitation is attributed to artificial intelligence. Nowadays, teenagers use computer metaphors and phone applications to create ideal images of themselves or others, identifying themselves with someone or something.

Collage creation method. Children and teenagers enjoy working in the collage technique. The older the child, the more complex the topics and the more effort is required. The richer the creative thinking and imagination. They choose materials, cut out pictures from newspapers and magazines, consult, listen to each other's advice, collaborate, develop their imagination and fantasy. In addition, working on a collage stimulates the development of a complex system of mental movements and operations. Mental actions are formed gradually, going through a number of stages: motivation (why to do it); assumptions (what to do and in what order); process (performing actions); verbal accompaniment (saying movements out loud); self-presentation.

The method of didactic games. This method is aimed at making the learning process more interesting. Its essence is imitation through modeling. In the game, teenagers repeat simple actions and imitate reality. Such games are also called simulation games. The method of didactic games has a number of advantages: the process of completing the task itself is important for the subject, which arouses interest in the course of the game; the game stimulates creative thinking; creates motivation for learning; develops communicative skills; forms new intellectual constructs and cognitive-behavioral models.

Creative research. We prepared tasks for cognitive activity in accordance with the rules for conducting collective creative work. In the first part, the subjects were presented with interesting, relevant and educational stories based on the results of completing these tasks. In the second part, they themselves came up with and presented such stories. As a result, new skills for constructing cognitive activity were formed. Thus, a number of changes were noted in the application of taxonomies for the development of adolescents' cognitive skills in the learning process. The reason for this was the creation of a favorable educational environment for the effective development of adolescents' cognitive activity in the learning environment. Such an environment forms both a psychological and pedagogical basis for the formation of cognitive skills [6].

RESEARCH METHODS / МЕТОДИ ДОСЛІДЖЕННЯ

The methods selected and applied correspond to the purpose of the study and the solution of the set tasks, as well as the testing of hypotheses:

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1) theoretical analysis: is carried out with the aim of identifying the factors underlying the cognitive activity of adolescents, its effective organization in the learning process and development paths;

2) observation: the purpose of studying the cognitive activity of adolescents aged 10–15 in the learning process, the pedagogical influences that teachers have on them in this process, the style of teaching and learning, the relationship between cognitive goals, cognitive activity and the taxonomy of cognitive skills;

3) conversation: with students, parents, teachers and school administrators about the features of adolescents' cognitive activity in the learning process, methods, means and ways of scientific, pedagogical and psychological support provided to them in the formation of cognitive skills and abilities. They are organized to clarify the role of influences in this process;

4) interview: with teachers, parents and school principals, the need for students' cognitive activity in the implementation of educational programs was determined, as well as the state of implementation of the facilitator's functions in the development of cognitive abilities in this process;

5) questionnaires: conducted with teachers, parents and teenagers to collect information about the initial situation in order to ensure the solution of the set tasks;

6) survey tests: used both to collect initial data and to diagnose the results;

7) analysis of the products of the activity: the results of projective tests and assignments of the subjects were analyzed and summarized with the results of other methods;

8) didactic and role-playing games: used for motivation and emotional optimization of the programmable learning environment;

9) methods of non-active-active learning: implemented at various stages of experimental lessons to develop cognitive skills in students.

10) mathematical and statistical methods: the obtained statistical data are, generalized their interrelations are described using tables and figures.

RESEARCH RESULTS / РЕЗУЛЬТАТИ ДОСЛІДЖЕННЯ

We can summarize the results of the article by making several observations.

1. Cognitive methods create an effect of intellectual game for teenagers, motivating them to learn and increasing interest in the process. The course of cognitive methods is designed in such a way that teenagers enthusiastically go to solve the task at hand, without facing serious problems. Both the structure and application of these methods are regulated in such a way that teenagers do not feel that the process is becoming more complicated and do not experience emotional stress.

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2. Cognitive methods, in addition to encouraging teenagers to be creative, provided them with the opportunity to get acquainted with innovations, diversity and encounter seemingly interesting situations. Another aspect that made cognitive methods interesting for teenagers was that they included such tasks as symbolization, coding, visualization and construction of algorithms. Each of them created the impression of being in a virtual world, living in this world.

3. The first condition for developing the ability to regulate specific operations in adolescents is motivating them to study. In this case, adolescents understand the essence of the problem, show interest in choosing adequate action models to solve it, building a solution strategy, dividing their actions into stages and choosing adequate ways of implementation. Ensuring emotionality in classes stimulates cognitive processes in adolescents that are necessary for solving problems, they show volitional efforts, exercise control over their actions, and take the initiative in objectively assessing the results.

4. There are connections between the cognitive skills formed in adolescents under the conditions of using taxa. In this process, the development of communicative and psychomotor skills, along with cognitive skills, activates the structures included in the cognitive system. The sequence, coherence and systematicity of the tasks given to achieve the goals established in the taxonomies for understanding, activation and assimilation clearly demonstrated the changes between the previous and subsequent states of the subjects. These changes were manifested in their interest in planning and systematizing their actions, identifying and establishing connections between decisions at stages, classifying and modeling information, comparing and justifying results, and making decisions [19].

5. The subjects also showed a significant increase in emotional stability. They were not afraid to stand out among their peers, compare themselves with others, were tolerant of self-criticism and self-analysis. They treated the factors regulating the emotional sphere differently, taking them for granted and showing initiative, asking for help in performing cognitive tasks or helping others. In addition, the adolescents also showed increased empathic tendencies, such as cooperation, giving presentations, self-expression, and regulating role-playing games.

The study showed that since cognitive activity required significant volitional efforts from adolescents, most of them were weakly motivated to perform a number of complex operations that seemed difficult to solve in the learning process. Such cases include: independence in satisfying cognitive interests, high selectivity, efficiency, systematicity and creativity in searching, finding and processing information to perform various tasks, assessing the essence of information, demonstrating communication skills when working as a team interacting in the course of joint activities and bearing responsibility for

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their own effective work. It was also determined that the reasons for the poor development of cognitive skills in students when using taxonomies in modern curricula are the incorrect solution of scientific, methodological and didactic issues in organizing the learning process, incorrect motivation, their inconsistency with real life and leading activities, as well as the lack of a clear formulation of the research question [6].

Our main methodological approach to the study was based on the psychology of action. Based on theoretical sources, it is shown that activity is a form of existence for every person with a normal psyche. A person's personality is formed in the process of activity. Personality development occurs in real experience, in the process of effectively building age-appropriate leadership activity, understanding the actions performed, learning and applying new experience, in the process of activity in which the interaction of the subject and object occurs.

In this sense, cognitive activity is a special type of activity of the subject, aimed at cognition and purposeful, creative reorganization of the world in which he lives, but it is not always purposeful. Therefore, the effective development of cognitive activity in modern psychology has become one of the main issues of concern to everyone. Its conditions and how it occurs are of interest to researchers. The same attitude exists in cognitive psychology, educational psychology and in pedagogy itself. The reason for this is the rapid development of information technology in the world in recent decades, the emergence of common cultures, economic, political and cultural interests. These interests have led to the creation of similar conditions for the educational systems of different countries. In most civilized countries, students' knowledge is now assessed electronically. Naturally, this creates the need to adapt students' educational activities to these technologies. Now the student must concentrate more on his cognitive activity, plan it better and achieve more accurate results. The operations performed here, symbolization, coding, work with symbols, in short, everything is adapted to the operations performed by machines. This requires a cognitive approach to the activity built into the learning process. Cognitive activity requires motivation from the student.

CONCLUSIONS / ВИСНОВКИ

The emergence of cognitivism in the history of psychology created new opportunities for pedagogical practice. The learning process has led to significant innovations in the approach to the cognitive processes and interprocessual connections involved in students' comprehension activities. Researchers and practitioners have begun to explain and accept these processes not only as

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processes that continue within their own boundaries and over a limited period of time, but also as complex mental events that occur in relation to phylogenetic information, individual experience, individual structure, intuition, and the unconscious. Cognitive activity differs from simple perceptual activity by its complexity and qualitative indicators. We can call any cognitive activity cognitive activity, but not every cognitive activity occurs ideally at the level of cognitive activity. The main feature that distinguishes cognitive activity from perceptual activity is that it requires a number of interconnected actions from the subject from beginning to end and a more effective result. The main idea of our findings is as follows: the cognitive activity of adolescents is a motor-operational system that occurs as a result of subjective-volitional efforts, is motivated and regulated by the emotional-volitional sphere and is accompanied by familiarization movements. In order for this system of actions-operations to achieve the set goals, a close connection of content, form and purpose must be established between the individual consciousness and what is presented to it. In this case, the ongoing cognitive processes will direct and centralize the educational activity of the teenager, ensure the acquisition of new cognitive skills.

The study established that the main topics of discussion are two structures of functional processes of cognitive activity: affective and cognitive processes. Affective processes are associated with creativity as an expression of subconscious conflicts. Perception processes are a specific expression of the surrounding world. With the help of imagination, which is involved in this process, adolescents understand signs, symbols, diagrams, texts, etc., relying on creative means or various impressions. This process occurs with the help of visualization. When affective processes are added to cognitive activity, the power of imagination and creativity in general increase significantly. We achieved this during trainings, freeing adolescents from unnecessary self-control, from feelings of inhibition, inferiority, incompetence, failure, failure, as well as from false cognitive constructions, judgments and thoughts that generate doubts and low self-esteem.

Research has shown that the easiest way to understand cognitive activity is to model it. A cognitive activity model is a model that, on the one hand, should reflect the manifestation of the cognitive field and the processes that form it in activity, and on the other hand, the interaction of the cognitive field with internal and external factors that motivate a person to act. In addition, a cognitive model is a schematic representation that allows us to better understand cognitive problems and come to conclusions by explaining their structure. In this description, you can get information about the beginning, course and results of cognitive activity aimed at obtaining information. With the help of the description given in the cognitive model, the method for solving a problem situation is better

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understood, contradictions in the process are revealed, the quality of the presented cognitive system is improved. analysis is possible. Although there are general principles for developing cognitive models for various areas of mental activity, models related to specific age and educational activities differ somewhat in their structure. The purpose of developing a cognitive model in our study is to explain, generalize and clarify the hypotheses put forward about the structure of cognitive activity, as well as to draw conclusions based on the research results. The main goal here is to express the components that are important for the formation of cognitive skills based on the curriculum standards defined for the subjects. The psychological and pedagogical model of cognitive activity also reflects the factors under the influence of which this process occurs in adolescence and how it occurs. The features of innovative activity, the interaction of the motive of leading activity and motives for learning, as well as the cognitive structures regulating this process are reflected [3].

The results of the learning activity of a teenager are determined by the cognitive structure that he/she possesses. This structure combines the unity of other features and qualities of a teenager, as well as his/her natural and social capabilities. A high level of cognitive structure is associated with the emotional state of the inner world of teenagers. The ability to learn in various conditions, understand the laws of the surrounding world, regulate one's activity from an emotional point of view is higher in teenagers. All cognitive processes are involved here, including emotional and volitional ones, with close associative connections. The role of teenagers in the formation of cognitive structures and skills that regulate their learning activity is determined by the needs and interests that motivate this activity, their emotional nature, and the psycholinguistic system and cognition are conditioned by the interrelation of activity. In the context of self-activation of a teenager, broader opportunities are created for the manifestation of his/her subconscious, imagination processes and cognitive images. Unlike simple cognitive activity, it transforms the acquired knowledge into skills. Only such activity can be called cognitive.

Prospects for further research in this direction / Перспективи подальших досліджень у цьому напрямі. Cognitive activity is carried out on the basis of its components and stages, which complement each other. These are processes, actions and operations. This activity is based on systematic and consistent step-by-step actions. These actions, which go through the management, executive, corrective and implementation stages, are a continuation of each other and qualitatively determine the subsequent stage. Therefore, cognitive activity should be considered as a dynamic process, systematically structured from beginning to end and requiring the activity of the subject. It has been established that with a step-by-step organization of cognitive activity,

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adolescents give priority to the natural possibilities of thinking to a greater extent than to the construction of operations in their actions, relying on the style of work accustomed to this age. They lack experience in choosing and developing a more effective plan of action corresponding to their type of intelligence, a creative approach to solving a problem, and searching for alternative solutions. By using the methods, he offers, as well as by working with suitable methods and techniques that activate cognitive abilities, a favorable environment is created for the emergence of new cognitive skills in adolescents. In this case, they manage to achieve the expected results.

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ЗАСТОСУВАННЯ ПСИХОЛОГО-ПЕДАГОГІЧНИХ МЕТОДІВ У ФОРМУВАННІ ПІЗНАВАЛЬНИХ УМІНЬ

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Анотація. З початку XX століття світова історія вступила в нову еру глобалізації. Це висунуло нові якісні та кількісні вимоги до результатів людської діяльності в освіті та різних сферах праці. У швидко мінливому середовищі, де сучасні інновації змінюють одна одну, люди стикаються з необхідністю розуміння проблемних ситуацій і набуття необхідних когнітивних навичок для їх вирішення. Відповіді на питання про те, як формуються ці навички, як розвивається когнітивна структура, притаманна концепціям «нової людини» та «нової особистості», і як забезпечити ефективну, орієнтовану на результат пізнавальну діяльність, лежать у новому полі – когнітивна психологія. З цієї причини сучасні дослідження в когнітивній психології, зокрема дослідження формування когнітивних структур в освітніх середовищах на різних етапах онтогенезу, набувають особливої актуальності. Застосування цих знахідок у освітньому процесі є пріоритетом. З початку XXI століття у цьому контексті виникла ще одна помітна проблема. Стало

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очевидним, що важливо створити нові педагогічні практики, які інтегрують такі поняття, як «штучний інтелект», «комп'ютерні метафори» та «когнітивні навички», запропоновані когнітивною психологією. Отже, когнітивна психологія стала ключовою дисципліною для вивчення змін у людській психіці та вирішення критичних, але невирішених питань. Одним із таких питань є визначення психолого-педагогічних умов формування пізнавальної активності учнів у освітньому процесі. Нові відкриття у цій галузі можуть допомогти визначити методи, інструменти та екологічні стандарти, необхідні для організації свідомої, орієнтованої на результат та ефективної діяльності серед учнів під час процесу навчання. Це дозволило б більш ефективно організувати пізнавальну діяльність. Набуття здобувачами освіти знань, умінь і навичок – основних суб'єктів освітньої системи відбувається у процесі навчання. Кожна проблема, пов'язана з цим процесом, вивчається в рамках психологічної діяльності учнів і вихователів. Таким чином, звернення до пізнання в процесі навчання та, у сучасних підходах, дослідження когнітивної сфери та когнітивної діяльності починається з виявлення зв'язків і відносин між психопедагогічною структурою та іншими сферами. Когнітивні навички розвиваються паралельно із самоідентифікацією підлітків, їх співставленням з образами, близькими до їхніх емоцій, схильностей, бажань і, зрештою, їх самосвідомості. Нові навички формуються під час систематично, цілеспрямовано та методично побудованої пізнавальної діяльності підлітків у процесі навчання. Іншими словами, ефективна пізнавальна діяльність під час навчання сприяє досягненню підлітками життєвих цілей. Таким чином, зростає потреба досліджувати пізнавальну активність підлітків у процесі навчання та фактори, які її стимулюють, посилаючись на діяльнісний підхід, критичний напрям у когнітивній психології. Пізнавальна діяльність підлітків залежить від спонукальних мотивів. Воно не має регулюватися випадковими мотиваціями. Якщо навчальна діяльність мотивована внутрішніми почуттями, бажаннями та емоціями, можуть виникнути труднощі у виконанні діяльності з вольовим зусиллям. Для досягнення позитивних результатів пізнавальна діяльність підлітків має відповідати їх ціннісно-мотиваційній сфері та потребам у самоідентифікації, саморозвитку та самоствердженні, супроводжуватися від початку до кінця емоційно-вольовими зусиллями. У дослідженні цей рівень мотивації виділяється як одна з найважливіших умов, що формують психологічну структуру

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пізнавальної діяльності. У педагогічній психології питання про те, як навчальна діяльність підлітків спонукається потребами та інтересами набувати пізнавального характеру, є однією з тем, що потребують комплексного вивчення.

Ключові слова: пізнавальна діяльність; знання; навички; здібності; підлітковий; сучасний підхід; процес навчання.

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