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# PSYCHOLOGICAL CHARACTERISTICS OF THE DEVELOPMENT OF COGNITIVE ABILITIES IN STUDENTS

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Annotation. This article highlights the psychological characteristics of the development of cognitive abilities in students — namely mental processes such as thinking, memory, attention, imagination and solving problem situations. In the process of cognitive development, the role of the individual approach, educational motivation and the environment are analyzed. The importance of modern pedagogical technologies, interactive methods and psychological trainings in increasing the intellectual potential of students is also substantiated. The study proposed effective strategies taking into account the characteristics of the age period of psychological development. The article includes methodological recommendations to improve the quality of education in higher educational institutions and promote the intellectual development of students.

**Keywords:** cognitive abilities, psychological development, thinking, memory, attention, student, educational motivation, intellectual potential, psychological characteristics, educational process, interactive methods, personal development.

#### Introduction

Cognitive abilities are a complex of psychological processes such as thinking, remembering, focusing, analyzing, solving problems, and play an important role in the educational process. For students, the formation of these abilities leads not only to academic success, but also to personal development, creative thinking and flexibility in professional life.

The purpose of the article: to identify the psychological characteristics of the development of cognitive processes in students; to analyze methods and techniques aimed at increasing them. Nazariy asoslar va psixologik xususiyatlar

**Cognitive independence.** It is important — that the student can independently formulate his opinion, actively perceive new information and adapt it in changing conditions. Independence is closely related to metacognitive abilities such as attention management, self-control, and planning.

**Motivation and passion.** For the development of cognitive processes, it is necessary for the student to have curiosity, internal motivation for learning (intrinsic motivation). Only external incentives may not be enough. Novelty, problem situations and personal importance increase motivation.

**Emotional state.** Such as Stress, anxiety, mental fatigue slow down the thought process, reduce the efficiency of attention and memory.otivation and passion. For the development of cognitive processes, it is necessary for the student to have curiosity, internal motivation for learning (intrinsic motivation). Only external incentives may not be enough. Novelty, problem situations and personal importance increase motivation.

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**Emotional state.** Such as Stress, anxiety, mental fatigue slow down the thought process, reduce the efficiency of attention and memory. Students need emotional balance, a comfortable psychological atmosphere, and support.

**Individual psychological characteristics and individualism.** Each student will have different abilities, intellectual level, learning style, needs, and psychological state. Educational strategies should be applied with this individualism in mind.

Composition and interdependence of cognitive processes. For example, Attention (attention), memory (storage in memory), language comprehension, logical thinking, creative thinking — these are related to each other, and improving one can have a positive effect on the other. Management of cognitive load (cognitive load) is important.

Reflexivity and metacognitiveness. Analyzing one's own opinion, being able to see mistakes, planning, controlling and evaluating the learning process is a component of metacognitive activities. Reflexive abilities allow students to analyze and improve their reading styles, mistakes. Innovative thinking. Creating new ideas, finding new perspectives out of old solutions — necessary in areas such as science, technology, art.eflexivity and metacognitiveness. Analyzing one's own opinion, being able to see mistakes, planning, controlling and evaluating the learning process is a component of metacognitive activities. Reflexive abilities allow students to analyze and improve their reading styles, mistakes.

**Innovative thinking.** Creating new ideas, finding new perspectives out of old solutions — necessary in areas such as science, technology, art. It is necessary to stimulate innovative thinking, engage students in creative tasks.

**Empirical research and evidence.** In the article" psychological characteristics of the development of student cognitive processes", the methods of cognitive activity among students, motivational and emotional factors, personality traits are studied on the basis of statistical analysis.

Strategic memory and advanced reasoning (SMART: Strategic Memory Advanced Reasoning Training) Training Method has been shown to be effective in improving cognitive abilities, academic performance, and decision making in final year students.

Several articles on the pedagogical-psychological properties of reflexive abilities highlight aspects of student self-awareness, critical thinking, self-assessment, and increasing the ability to observe changes in the course of their studies.

#### Methods for developing cognitive abilities

The following methods are effective in developing cognitive areas in students:

**Active educational methods** — solving problems, discussion, group work, projects-turn the student from a passive listener to an active participant.

**Teaching metacognitive strategies -** students must learn to plan, control, evaluate their learning process: "how do I remember this information?thods for developing cognitive abilities.

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**Teaching metacognitive strategies -** students must learn to plan, control, evaluate their learning process: "how do I remember this information?", "Where was I wrong?", "What's better next time?"questions.

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**Repetition and distributed practice (spaced practice)** - it is more efficient to assimilate information not instantaneously, but through repetition in small pieces over time.

**Assignment of tasks in a differentiated style** — students gain varying degrees of knowledge and skill-should be given through personalized paths, making tasks easier and more complex.

**Cognitive load management -** when there is a lot of information, the student gets tired, the concentration decreases epetition and distributed practice (spaced practice) - it is more efficient to assimilate information not instantaneously, but through repetition in small pieces over time.

**Assignment of tasks in a differentiated style** — students gain varying degrees of knowledge and skill-should be given through personalized paths, making tasks easier and more complex.

**Cognitive load management -** when there is a lot of information, the student gets tired, the concentration decreases. Therefore, it is important to give information step by step in classes, use such tools as visual aids, graphics, diagrams.

Encourage new forms of thinking through innovative and creative activities - projects, interactive methods, creative tasks.

Emotional and social support-it is important that students are in a comfortable environment in which they feel, are not afraid to make mistakes, receive positive communication, advice from teachers and peers. Encourage new forms of thinking through innovative and creative activities - projects, interactive methods, creative tasks. Emotional and social support-it is importap

#### Conclusion

Cognitive abilities in students are the main element for successful education and personal development. Factors such as motivation, emotional state, personality traits, metacognitiveness and innovative thinking play an important role in their formation.

Mentors, educational institutions and psychologists should take these factors into account and constantly support methods and strategies aimed at developing students 'cognitive processes.

#### Recommendations

The introduction of psychological factors in the formation of lesson plans — planning, taking into account the motivation, emotional state of students.

Student-centered approach-teaching taking into account individ individuality.

Metacognitive trainings and reflex exercises should be used in each course.

Making the educational environment comfortable is to reduce mental stress, stimulate active communication.

Cognitive load optimization is the gradual delivery of information, the use of visual materials. Monitoring student growth and adapting strategies through verification and analytical evaluation.

#### Literature used:

- 1. Istamovich, A. A. S. (2025, January). SOCIAL PSYCHOLOGICAL FACTORS AFFECTING STUDENTS'SCIENTIFIC AND CREATIVE ACTIVITY. In International Conference on Medical Science, Medicine and Public Health (pp. 63-67).
- 2. Назаров, А. М., & Агамурадов, С. И. (2022). Особенности психологической защиты личности в подростковым возрасте. Science and Education, 3(2), 654-660.
- 3. Agamurodov Sarvar Istamovich (2024) OLIY TA'LIM TALABALARDA IJODIY SALOHIYATINI RIVOJLANTIRISHNING PSIXOLOGIK XUSUSIYATLARI (2024 № 7, Sentyabr), 134-137

Impact factor: 2019: 4.679 2020: 5.015 2021: 5.436, 2022: 5.242, 2023:

6.995, 2024 7.75

- 4. Agʻamurodov S.I. Oliy ta'lim talabalarida oʻquv motivlarini takomillashtirishning pedagogik-psixologik omillari. // Pedagogik mahorat. Ilmiy-nazariy va metodik jurnal. − Buxoro. № 10, 2024. − B. 14-17
- 5. Agʻamurodov S.I. Talabalarda ijtimoiy faollik nomoyon boʻlishining psixologik xususiyati. //Oliy harbiy ta'lim muassasalari va harbiy qismlarda psixologik xizmatni tashkil etishga zamonaviy yondashuv: nazariya va amaliyot mavzusidagi Xalqaro ilmiy-amaliy konferensiyasi toʻplami. 2024. Toshkent B. 417-422.
- 6. Agʻamurodov S.I. Психологические механизмы развития творческой активности студентов //"Proceedings of International Conference on Scientific Research in Natural and Social Sciences" Hosted online from Toronto, Canada. Kanada. 2024 yil 5-dekabr. B. 20-27
- 7. Agʻamurodov S.I. Socio-psychological features of the formation of entrepreneurial abilities in disabled students. //Вестник интегративной психологии. Ярославль. № 33, 2024 С. 11-15.
- 8. Agʻamurodov S.I. Formation of professional self-conception, entrepreneurial skills in adolescents and factors affecting this process. //Pedagogik mahorat. − Buxoro. №2, 2024. − B. 22-25.
- 9. Agʻamurodov S.I. Особенности психологической защиты личности в подростковым возрасте. // "Science and Education" Scientific Journal / ISSN 2181-0842 February 2022 / Volume 3 Issue 2 B 654-660.
- 10. Agʻamurodov S.I. Применение деловой активности и е социальнопсихологических особенностей в деятельности подростков. // Ta'lim va innovatsion tadqiqotlar. – Buxoro,№1, 2024. – B. 181-185.