

THE ESSENCE OF COGNITIVE DEVELOPMENT OF PRE-SCHOOL CHILDREN ON THE BASE OF NEUROPEDAGOGICAL APPROACHES

Alieva Odila Madaminovna

IRATDSEP basic doctoral student

eraliyevaodila1@gmail.com +998976247353

Abstract: This article analyzes the cognitive development process of older preschool children based on neuro-pedagogical approaches. The integration of neuropsychology and pedagogy enables the organization of an effective educational process that considers the child's individual abilities and perception characteristics. The article discusses the neurobiological foundations of cognitive development, the didactic principles of neuro-pedagogy, and modern educational technologies. Practical recommendations for supporting children's cognitive development are also provided.

Аннотация: В данной статье рассматривается процесс когнитивного развития детей старшего дошкольного возраста на основе нейропедагогических подходов. Интеграция нейробиологии и педагогики позволяет организовать эффективный образовательный процесс с учетом индивидуальных способностей и особенностей восприятия ребенка. В статье освещены нейробиологические основы когнитивного развития, дидактические принципы нейропедагогики и современные образовательные технологии. Также даны практические рекомендации по поддержке когнитивного развития детей.

Annotatsiya: Ushbu maqolada neyropedagogik yondashuvlar asosida maktabgacha katta yoshdagi bolalarning kognitiv rivojlanish jarayoni tahlil qilinadi. Neyropsixologiya va pedagogika integratsiyasi bolaning individual qobiliyatlari va idrok xususiyatlarini inobatga olgan holda samarali ta'lim jarayonini tashkil etish imkonini beradi. Maqolada kognitiv rivojlanishning neyrobiologik asoslari, neyropedagogikaning didaktik prinsiplari va zamonaviy ta'lim texnologiyalari yoritiladi. Shuningdek, bolalarning kognitiv rivojlanishini qo'llab-quvvatlash uchun amaliy tavsiyalar ham beriladi.

Introduction The development and future of society is closely related to the advancement of its education system. Therefore, one of the strategic issues currently facing the continuous education system is the formation of a new type of education and the creation of an international educational environment. This issue is clearly exemplified by the implementation of a number of directive documents signed by the leadership and government of our country. This places the responsibility on the continuous education system to foster a desire for learning, spiritual and moral purity, faith, integrity, dignity, honor, compassion, and other human virtues in young people. It also aims to ensure that they grow physically and mentally healthy. "When we talk about health, we envision not only physical health but also spiritual health for children." Modern pedagogy and neuropsychology emphasize the need for in-depth research into the intellectual development of children. Neuropedagogy suggests integrating biological and pedagogical approaches to effectively develop children's cognitive processes. This article

analyzes the essence, significance, and methodology of neuropedagogical approaches in the cognitive development of preschool children.

1.Theoretical Foundations of Neuropedagogy Neuropedagogy ensures the development of an individual approach based on the neurophysiological processes in a child's brain during the educational process. Research shows that for preschool-aged children, personalized teaching methods enhance the effectiveness of cognitive development.

2.The Importance of Neuropedagogical Methods in the Process of Cognitive Development Interactive activities, game technologies, and multisensory approaches are used to develop the cognitive processes of preschool-aged children. In particular, cognitive games yield effective results in developing logical thinking.

The process of neuropedagogical diagnostics includes several stages. Initial assessment identifies the student's overall health, learning motivation, and psychological state. Subsequently, cognitive abilities, including logical thinking, creativity, and attention, are analyzed. An individual approach is chosen for each student and tailored to the educational process.

3.Neuropedagogical Technologies for Preschool-Aged Children

Based on neuropedagogical approaches, the following technologies are proposed:

- Multisensory learning materials (learning through sight, hearing, and movement)
- Education based on gamification (learning through play)
- Digital technologies and interactive simulations

Cognitive Education Technology A personalized independent learning technology that ensures understanding of the environment by shaping the system of cognitive schemas necessary for successful adaptation to living in a modern information-based society in learners.

4. Application of Neuropedagogy in the Educational Process

Based on neuropedagogical approaches, individual learning strategies are developed, and teaching methods tailored to each child's biological and psychological characteristics are applied. Research shows that an education system formed on the basis of neuropedagogy helps achieve positive results in developing children's attention, memory, and cognitive abilities.

Conclusion Neuropedagogical approaches are considered an effective method in the cognitive development of preschool-aged children. Research shows that multisensory education, interactive methods, and individualized approaches significantly improve the cognitive development process. Future research should focus on exploring the integration of neuropedagogy with innovative technologies.

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