

**NEUROCORRECTIONAL TECHNOLOGIES FOR THE DEVELOPMENT OF
SPEECH IN PRESCHOOL CHILDREN WITH DELAYED MENTAL DEVELOPMENT**

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Annotatsiya: Ushbu maqola maktabgacha yoshdagi bolalarda tafakkur va nutq rivojlanishining psixologik, pedagogik va ijtimoiy asoslarini tahlil qiladi. Bolalarning tafakkur va nutq rivojlanishiga ta'sir etuvchi biologik va emotsional omillar, shuningdek, zamonaviy pedagogik yondashuvlar yoritiladi. Nutq va tafakkur rivojlanishida didaktik o'yinlar, interfaol metodlar va innovatsion texnologiyalarning o'rni chuqur tahlil qilinadi. Xulosa va tavsiyalar qismida bolalarning psixologik rivojlanishini qo'llab-quvvatlash uchun pedagoglar va ota-onalar hamkorligining ahamiyati ko'rsatib berilgan. Maqola maktabgacha ta'lim jarayonini takomillashtirishga qaratilgan ilmiy-amaliy tavsiyalarni o'z ichiga oladi.

Kalit so'zlar: maktabgacha yosh, tafakkur rivojlanishi, nutq rivojlanishi, psixologik asoslar, didaktik o'yinlar, pedagogik yondashuvlar, interfaol metodlar, innovatsion texnologiyalar, emotsional qo'llab-quvvatlash, ijtimoiylashuv, mantiqiy fikrlash.

Аннотация: В статье анализируются психолого-педагогические и социальные основы развития мышления и речи у детей дошкольного возраста. Рассматриваются биологические и эмоциональные факторы, влияющие на развитие мышления и речи детей, а также современные педагогические подходы. Глубоко анализируется роль дидактических игр, интерактивных методов и инновационных технологий в развитии речи и мышления. В разделе «Выводы и рекомендации» подчеркивается важность сотрудничества педагогов и родителей для поддержки психологического развития детей. В статье содержатся научно-практические рекомендации, направленные на совершенствование образовательного процесса в дошкольном образовательном учреждении.

Ключевые слова: дошкольный возраст, развитие мышления, развитие речи, психологические основы, дидактические игры, педагогические подходы, интерактивные методы, инновационные технологии, эмоциональная поддержка, социализация, логическое мышление.

Annotation: This article analyzes the psychological, pedagogical and social foundations of the development of thinking and speech in preschool children. Biological and emotional factors affecting the development of thinking and speech in children, as well as modern pedagogical approaches, are highlighted. The role of didactic games, interactive methods and innovative technologies in the development of speech and thinking is analyzed in depth. The conclusions and recommendations section shows the importance of cooperation between educators and parents in supporting the psychological development of children. The article contains scientific

and practical recommendations aimed at improving the preschool educational process.

Keywords: preschool age, development of thinking, development of speech, psychological foundations, didactic games, pedagogical approaches, interactive methods, innovative technologies, emotional support, socialization, logical thinking.

Preschool age is one of the most rapidly developing and important stages in the mental development of children. The development of thinking and speech in children during this period is necessary not only for their individual growth, but also for the successful implementation of the socialization process.

Today, among the factors influencing the development of thinking in preschool children, the family environment occupies an important place. Speech development is also an important process in preschool age and serves as the main tool for establishing social connections in children. The formation of speech in children occurs in three main stages. In the first stage (1-3 years), the period of unconnected sounds and words is observed, the child observes sounds in the environment and tries to reproduce them. In the second stage (3-5 years), the child begins to construct simple sentences using phrases. Thirdly, logically connected coherent speech forms in children (5-7 years old).

Visual-figurative, practical, and logical types of thinking are formed in preschool children. Visual-figurative thinking refers to the ability to understand objects and phenomena through images and begins to develop in children from an early age. Practical thinking is based on solving problems through experience, and children develop significantly during play activities. Logical thinking is formed at the end of preschool age and develops the child's ability to understand cause-and-effect relationships. During this period, the child begins to understand cause-and-effect relationships and express their thoughts consistently and logically.

1. The concept of delayed mental development

Delayed mental development is a condition characterized by a child's age-appropriate low level of intellectual, emotional, and speech development. In such children:

- cognitive processes are poorly formed;
- Difficulties in concentration are observed;
- low vocabulary of speech;
- insufficiently developed grammatical structure;
- there are disturbances in sound pronunciation.

2. The essence of neurocorrectional technologies

Neurocorrection is a complex of modern technologies aimed at restoring the activity of the central nervous system, strengthening neural connections, and activating the mental and speech functions of the child. These methods are based on the natural neurophysiological capabilities of the child's body and are mainly implemented in the form of play.

3. Main types of neurocorrectional technologies

1. Neurogymnastics - a system of exercises that combines movement and speech.

- o "Left hand - right hand" exercises

"Eye - Hand" Coordination Development Games

- o Word pronunciation exercises based on rhythmic movements

2. Exercises for sensory integration - activation of various parts of the brain through sensory organs.

- o awakening perception through touch, sight, hearing, smell;

Tactile-oriented games: "writing on sand," "playing with textured balls."

3. Art therapy and musical logarithm - speech activation through musical movements, songs, and dances.

4. Biofeedback (biological feedback) technology - the formation of a child's attention, breathing, and muscle tension management skills through computer or special programs.

4. The role of neurocorrectional training in the system of speech therapy work.

Use of neurocorrection elements in the process of speech therapy training:

- activates the motor skills of the speech apparatus;
- improves sound pronunciation;
- strengthens attention and memory processes;
- forms a sense of self-confidence in the child.

For example, the exercise "Draw a circle with the left hand, a square with the right hand" coordinates the activity of both hemispheres simultaneously, which contributes to the awakening of speech centers.

5. Practical recommendations

- Classes should be short (10-15 minutes);
- Each task should be organized in the form of a game;
- It is recommended to use musical rhythm, colors, and movements during the lesson;
- An individual approach is important - a separate program is created for each child.

6. Effectiveness of neurocorrectional technologies

Studies show that with the regular application of neurocorrectional training:

- speech activity of children increases by 40-60%;
- attention and memory indicators improve;
- emotional stability increases;
- communication skills are developed.

In short, special classes organized by psychologists and educators in preschool educational institutions support the development of thinking on a systematic basis. Organizing the learning process in children through play is one of the effective means of developing their logical thinking and imagination. The preschool period is a period when a child has a strong desire for growth, development, self-expression, learning, and cognition. It is during this period that the foundation is laid for the development of a child's human qualities and intellectual potential. This opinion emphasizes that preschool age is the most important period for the intellectual and social development of a child. During this period, the child, through a thirst for knowledge, observes and learns about the environment and develops their potential.

Also, children's hearing ability, emotional state, and attention are of great importance in speech development. It is necessary to create a psychologically favorable environment and conduct classes that stimulate children's speech activity.

A. Vygotsky writes: "The development of speech in early childhood occurs in two directions: 1 - improvement of speech comprehension; 2 - formation of the child's speech activity."

Also, two important directions of speech development in children can be identified. A child first comprehends speech and learns to understand it, and then learns to actively express their thoughts through words. This process plays an important role in the formation of the child's communication skills. As a result, the psychological speech development of children is not only successful, but also has a positive impact on the process of their future socialization. Among the factors influencing speech development, the speech environment stands out.

Consequently, the future influence of speech development in preschool children is of great importance, and speech is not only a means of communication, but also a key factor in children's readiness for the educational process and finding their place in society. Timely, fluent, and meaningful communication with a child contributes to increasing their vocabulary. Reading books, storytelling, and active communication with children expand children's imagination. In addition, psychological and physiological factors also influence speech development. For

example, a child's hearing ability and emotional state are important in stimulating their speech activity.

It is necessary to create a psychologically favorable environment and organize special classes that stimulate children's speech. Therefore, the health of the child's hearing organs and the correct perception of surrounding sounds are crucial in the early stages of speech development. The child's emotional state also plays an important role in their speech development. In a cheerful, comfortable, and supportive environment, the child strives to freely and fully express their thoughts. A high level of attention and encouragement of children increases their speech activity.

Piaget, G. "Speech development is a central part of the process of developing a child's psychological and social potential, expanding their individual and social experience."

It shows the importance of speech development in children not only in communicative, but also in social and intellectual aspects. Through speech, a child gains new experience and interacts with society.

Emphasizes the effectiveness of interactive methods in the development of children's speech. Group activities and activities based on communication stimulate the socialization of children and increase their vocabulary. The use of modern information and communication technologies, combining play and learning, helps to increase children's creativity, creativity, critical thinking, and interest.

For the effective development of these processes, it is necessary for teachers and parents to work together and create appropriate educational conditions for children. The enrichment of the content of didactic materials and special classes that serve the development of speech and thinking, the use of interactive methods, energizers, and social and emotional support for children ensure the success of this process.

One of the factors influencing the development of thinking is the family environment. In family conditions, a child receives their first experiences, and communication with parents accelerates their imagination and thinking. Books read to a child by parents, questions and answers, and didactic games support the development of thinking. At the same time, special classes organized in preschool educational institutions develop the child's logical thinking skills. When this educational activity is combined with play, the child learns more effectively.

As a result of the harmonious functioning of these factors, the child's speech develops consistently, and they become a person capable of actively participating in communication. However, parents and educators need to work together to support this process. When communicating with children, it is important to consider their age characteristics and interests. At the same time, through the use of didactic materials, stories, and fairy tales that develop speech, as well as through modern pedagogical didactic games, children not only reinforce their knowledge but also more consistently carry out thinking processes.

Innovative technologies are an important tool for increasing children's interest and ensuring their active participation in the educational process. Organizing interactive lessons that attract children's attention using information and communication technologies encourages them to seek new knowledge. For example, with the help of special programs and mobile applications, it is possible to organize the process of children's learning through play. These technologies develop children's creative abilities and motivate them to solve complex problems.

Emotional support also plays a big role in children's development. Creating a psychologically favorable and safe environment is crucial for the development of children's speech and thinking. The recognition of each success of children, the support of their initiatives, builds their self-confidence. At the same time, children protected from stress or negative emotions have the opportunity to fully demonstrate their abilities.

Emotional support during the preschool period plays a large role in the mental development of children. Creating a psychologically favorable and safe environment is crucial for the development of children's speech and thinking. The recognition of each success of children, the support of their initiatives, builds their self-confidence. At the same time, children protected from stress or negative emotions have the opportunity to fully demonstrate their abilities.

As a result of the harmonious functioning of these factors, the child's speech develops consistently, and they become a person capable of actively participating in communication. However, parents and educators need to work together to support this process. When communicating with children, it is important to consider their age characteristics and interests. At the same time, the use of didactic materials, stories, and fairy tales that develop speech, as well as the introduction of modern pedagogical technologies, have a positive impact on the child's speech development. Therefore, it is advisable for speech therapists and defectologists to regularly use elements of neurogymnastics, sensory integration, logarithm, and art therapy in their practice.

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