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PEDAGOGICAL INTERACTIONS FOR SENSORY DEVELOPMENT IN PRESCHOOL CHILDREN [10]

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Abstract: *Sensory education is a system of pedagogical interactions aimed at forming the ways of sensory cognition and improving sensory processes, i.e. formation of methods for sensory knowledge and improvement of sensation and perception. Preschool age is the most favorable period for intensive sensory development and upbringing of adolescents. The general level of sensory education and development at this age depends on the inclusion of the child in learning about the surrounding world.*

The authors emphasize the exceptional role of sensory education at this age, as a foundation for all other types of training and activities, as well as for successful socialization, which in turn begins precisely from this age period. The report presents effective forms, methods and resources for developing the sensory skills of children of preschool age, through a system of pedagogical interactions aimed at forming the ways of sensory cognition and improving sensory processes, i.e. formation of methods for sensory knowledge and improvement of sensation and perception.

Keywords: *Sensory, Effectiveness, Pedagogycal Methods, Model, Preschoole Education's, social and cognitive skills.*

INTRODUCTION

Sensory (from the Latin sensus - sense) is a set of elements of knowledge about sensation - the processes of sensation, perception, and idea. Therefore, it is customary to define these processes as sensory. Sensory development usually related to different senses such as (touch, vision, hearing, smell, taste) that enable us to discover the world around. The way we interact with others is referred to as having social skills. Children explore and attempt to make sense of their surroundings by using their senses. They accomplish this through touch, taste, smell, sight, movement, and hearing. Language development, cognitive growth, fine and gross motor skill development, problem solving abilities, and social interaction are all aided by sensory play. Preschool age is the most favorable period for intensive sensory development and upbringing of adolescents. Children that are socially adept are better able to engage with one another and form and maintain friendships. For younger children, social skills entail knowing how to interact with others. Important social skills for connecting with friends and classmates include taking turns, saying sorry when asked, and sharing toys. Social relationships in youngsters get more complicated as they get older. Cooperating with

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adult demands, displaying good sportsmanship, participating in a group activity while adhering to the rules, and effectively starting discussions are all examples of later childhood skills (Jordanov, V., 2020; Dineva, V., 2012; Alexandrache, C., 2014; Petrova, E., 2020; Eyubova, S., 2018; Fatima Rahim, A. H. Al-M., 2018).

Sensory education is extremely important for the general education of children. It is the basis of any other education moral, labor, aesthetic, etc. By teaching the child sensory education, namely orientation in space, recognition of objects and objects, etc., we teach him how to live (Sotirov, Ch., 2015; Nikolova, Yo., 2018; Neminska, R., 2015; Budakova S., 2018). The socialization of the child in society is also related precisely to sensory education.

The inclusion of the child in learning about the surrounding world depends on the general level of sensory education and development at this age. But without constant development of sensors, it is impossible to get to know the peculiarities of the natural and social environment and their sensory characteristics. Sensory education is closely related to the mental development and upbringing of adolescents. It appears as its basis, since sensory education takes place in the process of various types of children's developmental activities: work in nature, construction, drawing, application, etc. which require the active participation of both sensory and mental processes. Sensory education is of utmost importance for the proper functioning of thought processes.

Significant studies in this field of education have both some classics of pedagogical thought and many modern authors, such as F. Froebel; M. Montessori; O. Decroli; E. I. Tiheeva; A. P. Usova; N. P. Sakulina; B. G. Ananiev; A. V. Zaporozhets; L. A. Wenger; V. I. Loginova; E. G. Linogina; N. B. Wenger; E. Ivanova, 2017; P. Konakchieva, 2016; N. Krasteva, 2020; R. Mihailova, 2021; K. Velcheva, 2017, and others.

From the analysis of significant scientific research in this field, the opinion is imposed that sensory education represents an expedient system of pedagogical interactions aimed at improving the sensory-perceptual processes of adolescents and the consistent, planned formation of the basic units of perceptual knowledge. Sensory development is the basis for sensory knowledge and the development of certain mental functions and personality properties.

Social factors are also of essential importance for sensory development, the most important of which are the sensory experience and culture accumulated by society and the implementation of sensory education in accordance with them.

Sensory experience and culture are the result of the phylogenetic, individual and social sensory experience of humanity and represent a totality covering the whole variety of sensory characteristics of the surrounding world and the ways of their detection and determination. They are concretized in a rich system of sensory benchmarks, perceptual actions and ways of using them, ensuring adequate recognition of the objects.

A biological prerequisite for sensory development is the normal maturation of the sensory organs, which not only receive sensory information from the environment and carry out its initial processing, but also help the organism to control its reactions and manage its behavior. Another important prerequisite of sensory development is the enrichment of the sensory sensitivity of these organs, of sensory experience and culture, and of their effective connection with the processes of thought and speech.

In response to the recognized importance of the child's sensory education for his future life, in preschool pedagogy various models and systems for sensory education are available, developed, based on the achievements of psychological-pedagogical knowledge, aimed at justifying, organizing and optimizing this process (Tileva, K., 2022; Voinohovska, V., 2022; Valchev, K., 2017; Sulichka, I., 2021, etc.).

EXPOSITION

In the kindergarten, the child learns to draw, construct, model, gets acquainted with the phenomena of nature, and begins to master the basics of mathematics and literacy. Mastering skills and habits in all these areas require constant attention to the external properties of objects, their consideration and use. So, for example, in order to get a similarity between a drawn and an

observed object, the child must accurately feel and grasp the features of its shape and color. Construction requires the study of the forms of the object (sample), its structure. The child clarifies the relationships between the parts in space and correlates the properties of the sample with the properties of individual materials. Without constant orientation in the external properties of objects, it is impossible to get a clear idea of the phenomena in living and non-living nature, in particular about their seasonal changes.

The formation of elementary mathematical concepts presupposes familiarity with geometric shapes and their varieties, comparing objects by size.

In literacy, phonemic hearing plays a huge role - accurate differentiation of speech sounds and visual perception of written letters.

In life, the child encounters a variety of shapes, colors, etc., properties of objects, in particular toys and objects from the home environment. It gets acquainted with works of art - music, painting, sculpture. And of course, every child, even without purposeful upbringing, perceives this anyway. But if the assimilation is carried out spontaneously, without reasonable pedagogical guidance of adults, it turns out to be superficial, incomplete (Garvalova, M., 2022; Ivanova, B., 2018; Nikolova, Yo., 2021; Tileva, A., 2018). This is where sensory education comes to the rescue, consistent and regular familiarization of the child with the sensory culture of humanity. So, the role of parents is essential in developing kids' abilities and even in the future security of school interaction specifically by utilizing the new communication technology as they can play great role in anxiety reduction and academic performance (Al-Obaydi, Jawad & Rahman, 2022).

How should the environment be organized, or, what are the features of the didactic materials for "education of feelings", i.e. feel, according to Maria Montessori's method?

1. They should be interesting and entertaining for children.

2. The material should include, contain in itself the "rational gradualness of stimuli", i.e. to be gradually complicated. It begins with familiarizing the child with the sizes of objects: thick - thin, tall - short, large - small, long - short. This is achieved by visually comparing them.

In the next stage, the child learns the shapes of objects through nesting. Squares, no matter how they rotate, fit into their frame because they have the same length of sides. The rectangle, if we turn it over, will not fit in its frame because it has long and short sides. The difference between a circle and an oval, as well as between other similar shapes, can be shown. Next, the recognition of geometric shapes among surrounding objects and the environment can be developed.

An important place is occupied by the zone for the development of movements, where the child improves his motor habits, develops a sense of balance, strengthens his muscles, and develops motor planning habits. Children can climb stairs, crawl and walk on a board, the parts of which are located at different angles. In this part, it would also be good to have a sports complex, dry or water pool, etc.

The second area is the exercises to establish the cause-and-effect relationships and the transition from action to activity. The child can weigh weights, look at, touch and flip through the pages of sensory books/the pages and pictures in them made of different materials, cardboard, different fabrics, leather, etc. There are also many boxes - a box with a removable drawer, a box with a tied ball, pegs. Children learn to string disks on horizontal and vertical sticks and perform many other simple actions that become more complex habits.

The zone of sensory development gives the child the opportunity to use his senses when learning about the world around him. Here it can learn to distinguish the height, length, color, shape, noise and weight of different objects. Thus, he not only develops his feelings, but also makes them more accurate.

The fourth is the area for the development of fine motor skills. The child from half a year to 3 years goes through the phase of interest in small objects. This interest should manifest itself in an activity that is entertaining for him. In children at an early age, it is obtained on the basis of handling small objects during their sorting, pouring, etc. The sensorimotor coordination of the hands is ensured by the following mechanisms:

- Finger sensitivity - with the help of sensitivity, people study the object, determine its signs, adjust the shape of the palm and the strength of the grip, and act adequately with the objects.
- Sight allows us to orient ourselves to the position of objects in space, evaluates their qualities, and enables planning of grasping and action with them.
- Mechanism for regulating tone and muscle contractions, accurate and fast movements.
- Motor memory - the automation of habits.

The exercise area with water, which develops coordination, fine motor skills and also has a therapeutic effect, relieves increased excitement, calms the child, prepares him for practical exercises.

The zone of practical actions is organized in the groups of older children - from 2.5 to 3.5 years. Materials are located here, with the help of which the child learns to look after himself and his belongings. Using different objects, he learns to dress himself, pour himself water, and wash the dishes.

In the area of productive and visual activity for children at an early age, the image transmission technology is not up to date. The child learns to use different materials for drawing, to work with lines, compositions. The emotional background of this activity is important, so stories should be told; music should accompany drawing, etc.

Zone of speech development - from birth to 3 years, the child goes a long way in acquiring speech. Accumulates vocabulary, begins to speak the first words. Materials for the lesson are all objects from the environment - books, pictures, lottery tickets, animal figurines. Finger gymnastics, speech and movement, role-playing games are actively used.

The systems of sensory standards acquired by the child appear as basic means for perceptual actions. By again comparing the perceived qualities of objects with the corresponding elements of these systems, it more accurately and deeply recognizes the various properties of concrete objects; its perception is purposeful and organized. The assimilation of systems of sensory benchmarks substantially restructures the child's perception, raising it to a higher level.

Special efforts should also be made to develop auditory sensitivity to speech, music and noise sounds.

Attention is paid to tactile sensitivity, expressed in the ability to distinguish the qualities of objects when touched.

It is too difficult for children of preschool age to perceive and use time standards, since time does not have an object carrier, therefore the formation of ideas about time must be carried out through systematic observations and nature, everyday life, etc.

Sensory education takes place in the process of accumulation of immediate life experience by children and in all forms of activity, and survey as a method of sensory education is used at all moments of working with children where they have to perceive certain sensory characteristics and it is important for developing their self-esteem in their future studies (Al-Obaydi, Doncheva & Nashruddin (2021).

As a result of the effective organization of sensory education, children must acquire skills for reproducing objects verbally and relating them to the system of reference meanings.

E. Georgieva and E. Dragolova, in their book "Sensory education according to the method of M. Montessori" offers the following techniques for sensory education of children from the preparatory stage for school:

- Techniques for developing personal hygiene skills and habits.
- Techniques for developing skills and habits for self-dressing, shoe training and maintaining an aesthetic appearance.
- Technique for developing skills for independent and cultural eating.
- Technology and means to educate skills and habits to keep the children around you in order.
- Techniques for mastering communication skills and habits and manners of culture of behavior in society.

- Techniques for raising general sensitivity in children. With themes for *tactile sensations; thermal sensation; baric feeling; stereognostic sensations; development of the sense of smell, of taste, of sight, of the perception of thickness, of length, of height, of size; perception of forms, through the participation of visual-tactile-muscular sensations; education of "chromatic sense", color perception and development of auditory analyzer, hearing perception*.

Due to the limited volume of presentation of a scientific publication, only the techniques presented and analyzed by the authors were marked here.

In the following material, empirical materials from a specific study of pedagogical interactions for the sensory development of preschool children, which is currently being conducted, will be presented.

CONCLUSION

The main life activities are related to orientation in time and space. From this follows the conclusion that an essential role in this process is played by the degree of development of spatial orientation skills. The reproduction and transformation of spatial properties and relations between objects is the content of spatial images. Spatial properties characterize not only the appearance of the object, but also its structure, which determines its functional meaning. Relying precisely on the spatial properties, a person recognizes different objects, classifies them. They characterize the outline of the object, give it subject definiteness, individuality. From this perspective, we define spatial orientation ability as a specific cognitive ability involved in a wide range of mental operations.

In general, spatial orientation can be identified as a cognitive action or a cognitive structure, because cognitive abilities are a type of orientation. Spatial orientation can also be defined as a cognitive process characterized by different levels of complexity. In order to determine its essential characteristics, it is necessary to connect it with spatial thinking, which includes three processes: creation of spatial images (representations); operating with them; spatial orientation (real and imagined). We define the skill of spatial orientation as a coordinated sequence of actions that serve to achieve some goal or the performance of a given task.

Based on the analysis of modern theories of intelligence and considering the role of the spatial component in them, it can be concluded that:

- Mastering spatial knowledge is a mediated intellectual process;
- Spatial orientation as a cognitive action is developed by deriving, setting and solving cognitive problems, with the leading role of reflexive activity;
- Spatial competence of children is the result of purposeful educational activity.

Investigating these problems, Jean Piaget concluded that a perceptual space is constructed in the following sequence: from topological relations to fused metrical and projective relations, and then to relations united entirely by the relations between them. It is for this reason that in modern age psychology, the opinion has been accepted that a 3-year-old child can distinguish between open and closed figures, and in the following years of his development, he can gradually master topological relations as well. Children reach full readiness and ability to master topological relations after their eighth year, which corresponds to the period of learning at primary school age.

The natural path of sensory development combines in itself processes of maturation and improvement of the main characteristics of perception and sensors and their positive qualitative change and transformation. The various new formations that appear in this process are the result of social interactions that take place not only in getting to know the material world, but also in communicating with the human environment. The reform in the current educational system aimed at modernizing Bulgarian education is directly related to the development of the competence approach in all educational levels.

One of the central emphases in it is the unification of efforts to form basic competences necessary for building individuals to meet the requirements of the social level of society. A child's readiness for learning depends to a significant extent on his sensory development. Studies carried out by scientists show that a significant part of the difficulties that arise before children in the

course of primary education are related to insufficient accurate and flexible perception. As a result, there is a deviation in the writing, construction of the drawing, inaccuracy in the manufacture of products. It happens that the child cannot reproduce a movement according to a model and in physical education lessons.

But the matter is not only that the low level of sensory development sharply reduces the possibility of successful education of the child. The child's sensory development is no less important for his full-fledged creative performances. An important place in the list of abilities that ensure the success of musicians, artists, architects, writers, constructors is occupied by the sensory abilities that allow special depth, clarity and accuracy to capture and convey the inherent nuances in the form, color, sound and other external properties of objects and phenomena, and the sources of the sensory faculties lie in the general level of sensory development reached in the early periods of childhood.

The importance of the child's sensory development for his future life raises before the theory and practice of teaching children the task of developing and using the best means and methods for sensory development. The main direction of sensory education and upbringing is the building of a sensory culture from an early age.

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