



Ways to develop oral speech, spatial and temporal perceptions in children with alalia

S.N. Abdullayeva

3rd year doctoral student, Tashkent State Pedagogical University,
Tashkent, Uzbekistan

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Abstract: This study revealed that spatial-temporal representations are not stably formed in preschool children with alalia. They do not develop without special education, which complicates the process of formation of language tools expressing spatial-temporal relations and the possibility of using them in oral speech. This situation determined the need to create a system of speech therapy work to develop representations of spatial-temporal relations in preschool children with alalia. The results of the study made it possible to develop two main areas of correctional work: the formation of subjective sensations of space and spatial representations in children with alalia; the formation of subjective sensations of the passage of time and time representations in schoolchildren with alalia.

Keywords: Time, space, perception, imagination, speech therapy system, correction, subject, attitude, development, consciousness, principle, task, process.

Introduction: It is advisable to start corrective work on overcoming spatial-temporal disorders in children with alalia, first of all, with the development of elementary perception of individual properties of objects and the full perception of these objects in space and time. After that, it is necessary to proceed to the formation of ideas about space and time, starting with the development of understanding of the work, and then moving on to the reflection of spatial and temporal relations in oral speech.

Since the development of conscious time perception in children occurs later and at a more complex stage than the development of spatial perception [222], corrective work on the development of spatial representations at an elementary level in children with alalia occurs earlier

than the development of time representations.

We will consider the main principles, goals, tasks and main content of the corrective work we have outlined.

Correction of spatial representations in students.

The goal of work aimed at forming spatial relationships is to develop students' spatial orientation as a unique sensory-perceptual ability, in which spatial representations are directly related to the child's thinking, speech, and activity. One of the primary tasks of correctional education is to enrich the child's sensory and motor experience, the experience of subject-practical activity, and on this basis to form ideas about the scheme of his body in the surrounding space. In the process of the child's practical mastery of space, it is necessary to include the teaching of verbal forms of spatial relations, spatial terms. In special education, the genesis of the mastery of space by children and the leading role of the motion analyzer in this process should be taken into account from the child's early and preschool age [44, 57, 92, 147, 169]. In the formation of the sensory basis of orientation in space (spatial ideas), sensations and signals coming from the musculoskeletal system and the skin play a special role. Correctional work with children should begin with the development of these sensations, which serve as the basis for the formation of the lowest levels of spatial ideas.

The school program for children with severe speech disorders does not allocate time for the formation of separate spatial representations in children, therefore, the development of spatial relations is carried out as a component of any individual and frontal correctional training or by introducing certain methods into the training.

It is advisable to carry out the work on the formation of spatial representations in students in several stages:

Stage 1. Development of tactile and kinesthetic sensations and somatognosis

Purpose: to enrich the sensory and motor experience of children.

Task:

- to determine the location and name of various body parts;
- to teach to repeat and independently create various poses with the hand and poses involving the whole body;
- to develop the skills of recognizing figures, letters and numbers written on the back of the fingers or on the palms;
- to develop the senses and skills of recognizing objects

with surfaces of different textures and shapes.

To develop children's sensory and motor experience, exercises based on their direct interaction with three-dimensional space can be used, in which they learn about space using their bodies. In this type of work, we have included some methodological developments proposed by A.V. Semenovich [198, 199,200]. They include showing and naming body parts, reproducing and creating body positions (poses), and recognizing all types of tactile sensations. Let's consider specific tasks that children can perform.

- Task 1. The child is asked to show his own body parts first, then others.

- Task 2. The adult (teacher) touches any part of the child's body, then asks the child to show it to himself with his eyes closed, then, opening his eyes, shows it to the teacher and, of course, says its name.

- Task 3. The teacher puts his hand on any part of his body and asks the child to show this part of himself.

- Task 4. The teacher repeats body positions, in the creation of which the whole body participates, including hand positions, after the teacher, the game "Mirror".

- Task 5. The child must independently come up with his own body positions or depict various figures, letters and numbers using his body.

- Task 6. The teacher invites the student to recognize the shape, letter, or number that the student has written on his back, palms, and hands with his finger. These should be written on the right and left palms and on the backs of the hands. The child who recognizes the shape should copy it onto a piece of paper and/or name it.

- Task 7. The teacher shows the child objects with different surface textures (smooth, rough, ribbed, soft, prickly), names them, and offers to touch them. Then the child is asked to find an object with the same texture without looking (by feeling it with his hand).

- Task 8. Objects familiar to the child are placed in a bag and he is asked to find what it is by feeling it. In this case, the child should feel the object with both hands at the same time and with one hand alternately.

- It is necessary to achieve the reflection of the child's impressions and sensations in oral speech. All tasks are worked out in two plans: in actions that occur in conjunction with the speech of an adult (understanding is strengthened) and actions that the child himself expresses in speech.

- Stage 1. Formation of ideas about the "scheme of his own body".

- Purpose: the implementation of the process of

separating his organism from the environment in children and the development of a conscious perception of his own body.

- Tasks:
- formation of ideas about the "scheme of his own body" in practice (the "scheme" of the face, limbs, ventral and dorsal sides);
- training in the repeated or independent performance of a series of actions.

The child's mastery of the "scheme of his own body" is better if it is based on various markers: they help the child to be sure that there is a top and bottom (ceiling, sky - floor, grass), front - back (buttons on a shirt - hood), right and left sides (colored rags, a watch on one hand, a bracelet with a rough surface). At first, the formation of spatial directions is associated with the movement of the whole body in a certain direction. Later, the movement of the whole body is replaced by showing the indicated direction with the hands, head movements, and then only with the gaze. Work is also carried out on the relative location of all body parts (higher - lower, front - back, right - left). It is especially difficult for the child to understand the location of the right and left sides of the body. Therefore, it is necessary to first do exercises on the location of body parts relative to the right and left hands. It is important that the child learns to perform quick and precise movements with different parts of the body on verbal instructions ("raise the left sail up", "close the left eye with the right hand"). Some of the methods proposed by I.N. Sadovnikova and L.A. Pepik [181,190] can be used. For example, imitation games:

Task 1. Geese stretch their necks, turn their heads to the right and left, look behind them - is there a fox lurking?

Task 2. A fly landed on the bear's back, he turned around, tried to reach the fly first from his right shoulder, then from his left shoulder, finally the fly flew away, and the bear remained with his back to the ground.

Task 3. Buratino patted his left knee, stroked it, then held his knee with his hand and walked slowly.

After the child has formed the ability to correctly understand the location of body parts right-left, top-bottom, front-back, the use of these words in children's oral speech is strengthened.

Task 1. The speech therapist stands with his back to the children and makes movements with his hands, raises his left hand up, stretches his right hand to the right, puts his right hand behind his head, puts his left hand on top of his head, holds his left shoulder with his left hand. Children repeat the movements of an adult (one

movement at a time) and explain their movements.

Task 2. The child thinks up and shows the correct movement on his own, while he explains his movements orally.

In boarding schools, it is advisable to consolidate the knowledge gained with a speech therapist during organizational moments and during communication with the educator during the game.

Stage II. Development of orientation in the surrounding space.

Purpose: to educate a conscious perception of one's own position in space and the characteristics of the surrounding space.

Tasks:

- strengthen the ability to use one's own body as a standard (sample) in studying the surrounding space;
- teach to place objects relative to one's own body;
- acquaint children with the scheme of the human body standing in front of them;
- form the skills of placing objects relative to each other in the surrounding space.

Mastering the external space begins with the child realizing that he is in front of this space, behind it, above it, below it, to the right, to the left. After students have developed the ability to orient themselves in space (orientation), they move on to the orientation of other objects in relation to each other, and themselves in relation to other objects. This involves teaching the child to understand the connection in the mutual arrangement of surrounding objects, as well as to change it according to verbal instructions. It is important to teach children to correctly perceive the characteristics of the person standing in front of them in space, which causes considerable difficulties for children with alalia. It is necessary to consolidate the idea that the person standing in front of them is the opposite: right is my left, and left is my right. As a result, students learn to put themselves in the place of another imaginary person, to see things through his eyes, and most importantly, to name these things correctly.

The form of work can be both group and individual. In the form of individual work, various cards and homework are used. It is important that students constantly verbalize their sensations and directions of movement. After a speech accompanied by movement, students learn to express a planned thought: what am I doing now? Then they comment on the directions of movement of other children, and later they tell a story about spatial relationships without directly seeing the objects (about the location of the furniture in their room; about the location of the rooms in their

apartment; about how to get to the principal's office).

Task 1. The child places geometric shapes relative to the sides of his body: a circle in front of him, a square behind (on his back), a triangle to his left, a rectangle to his right. Then the student tells where what is standing.

Task 2. Now the child places the same shapes relative to the body parts of another person and tells what is where.

Task 3. Two students stand opposite each other. One child comes up with actions and asks the student opposite to repeat them, while he carefully watches to see if he repeats them correctly. For example, "raise your left hand up", etc. Then the children change.

Task 4. Two students stand opposite each other. One of them performs an action, and the other explains it using oral speech. For example: "You just touched your right ear with your left hand". Then the children change.

Stage III

Goal: to form the perception, reproduction and independent reflection of the spatial characteristics of objects on a plane.

Task: to teach children to:

- orient themselves on a blank sheet of paper;
- master the location of objects on a plane on a sheet of paper (top, bottom, right, left, upper right corner, etc.);
- place objects on a plane relative to each other on a sheet of paper;
- recognize drawn shapes;
- distinguish elements of shapes on a plane;
- to copy simple shapes, to analyze a series of shapes arranged in vertical and horizontal rows, to follow them correctly with the eye from top to bottom and from left to right, to copy a series of shapes
- to analyze complex shapes in space consisting of several other shapes and to copy them using the correct copying strategy
- to find orientation (to aim) on a sheet of paper turned 180°, to mentally rotate the sheet of paper 180°.

Orientation in two-dimensional space begins with familiarization with a blank sheet of paper and mastering its sides and angles. Then the child places various objects in the lower left and upper right corners and determines which corners are left unfilled. The understanding and verbalization of the location of objects, letters and numbers on a flat surface relative to each other on a sheet of paper is formed.

The following tasks can be offered:

Task 1. On a display canvas with cutouts for pictures, the corresponding pictures are placed on the left and right sides of the arch according to the instructions.

Task 2. Sitting at a table, its right and left edges are determined.

Task 3. First, a circle is placed, then a square is placed on its right side, and a triangle is placed on its left side.

Task 4. A dot is placed, a cross is placed to the right of the dot, a circle is placed above the dot, a square is placed below the dot, a triangle is placed on the right side of the square, and a V-shaped sign is placed on the cross.

Task 5. According to the verbal explanation, a chip is moved (to the right) along the board divided into cells, then it is said where the chip stopped. Moves: 2 left, 2 down, 1 right, 2 up, 1 left, 1 down.

Task 6. Letters are written to the right or left of the vertical line.

Then the tasks are complicated, that is, the sheet of paper is turned 180° and the child must now say where the right and left sides are.

Task 7. The child must determine the right and left sleeves of the blouse when he is a) standing with his back up, b) with his back down (pockets of jeans are determined in the same way).

It is advisable to use tasks aimed at recognizing drawn geometric shapes by comparing two given samples. Analysis of shapes, aimed at developing the skill of finding identical and non-identical elements of shapes in space, helps to direct the child's attention to the conscious perception of the relationships of objects in space. From tasks aimed at recognizing spatial relationships, the child moves on to tasks that require the reproduction of given shapes according to a model, which is carried out first using the drawing (copying) method, and then using the active construction of given shapes from given elements (sticks, cubes).

It is also necessary to develop the skill of isolating one of the links from a chain of objects, images, graphic symbols of the same type. First, the child masters the direction (orientation) in the linear sequence of a given object row. Then, using the example of the first decimal numbers, tasks are given to determine the sequence of a number row:

Task 1. Name the first number from the left; name the first number from the right. Which of them is larger? In which direction are the numbers in the row increasing? (From left to right).

Task 2. Show the number 4. What number is to the left of the number 4? Is it greater than 4 or less? Name the right neighbor of the number 4, and compare it in size

(numbers increase to the right). Analysis of a series of shapes arranged in vertical and horizontal rows, their correct tracking by the eye from top to bottom and from left to right, as well as the subsequent development of joint movements of the eyes and hands can be carried out using existing manuals for the development of visual-motor coordination. Children can be offered tasks on copying from a series of shapes, observing the correct direction and copying procedure. At the first stage, the copy is copied using a tracing paper, and only then can you move on to conventional copying [198]. The next step is copying from complex spatial shapes. They are first analyzed together with the child, divided into parts, and the correct sequence of drawing them is discussed.

Stage IV. Development of understanding and use of lexical-grammatical constructions expressing spatial relationships.

Purpose: to form quasi-spatial representations.

Tasks:

- to teach children to understand words and constructions that reflect the spatial characteristics of the surrounding world;
- to form skills in the independent use of words and constructions that express spatial relationships in oral speech.

Correctional work begins with clarifying the meaning of suffixes, endings, affixes, and conjugations, and then work is carried out on the use of affixes and conjugations by children. First, the child performs various actions and manipulations with objects according to the instructions of the teacher. Then the student clearly pronounces all the suffixes and conjugations mentioned and explains his actions.

REFERENCES

- Ayupova M.Yu. Logopedics. – T.: National Society of Philosophers of Uzbekistan, 2011. 600 p.
- Ayupova M.Yu., Aripova Sh.D. We pronounce and write correctly.//Methodical manual. – T.: National Society of Philosophers of Uzbekistan, 2015. 236 p.
- Zhukova N.S., Mastjukova Ye.M. Yesli Vash rebenok otstayet v razvitii. – M.: Meditsina, 1993. 112 p.
- Mironova S.A. Development of preschoolers' speech in logopedic activities. – M.: Prosveщeniye, 1991. 208 p.