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FEATURES OF THE INTELLECTUAL DEVELOPMENT OF SCHOOL CHILDREN WITH HEARING IMPAIRMENT

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Abstract

The article studied that when diagnosing the mental development of children with hearing impairment, it is necessary to take into account not only the features of children understanding the instructions proposed to them, but also the above features of the development of the regulatory function of speech, including difficulties in the development of speech.

Keywords: hearing impaired children, deaf children, hearing disorders, speech disorders and verbal-logical thinking, visual-figurative thinking.

Of particular importance in modern deaf psychology is the study of cognitive activity of children with hearing impairment and, above all, thinking as a central process closely related to speech.

Currently, many works of domestic and foreign psychologists dedicated to the thinking of deaf children have been published (V.Fron, 1951; M.Templin, 1950, 1954; G.Revesz, 1954; H.R.Myklebust, 1960; E.Levine, 1960; J.Rosenstein, 1960; D. Shaw, 1961; HMerlo, 1961; R. Faramt, 1964; A. McKenna, 1964; H. G. Fort, 1961, 1966, 1973; J. Snijders, N.O16men; .Conrad, 1970; P. Aleron, 1951, 1957, 1964, 1977; K. Meadow, 1980; M. I. Ushakova, 1956; A. I. Lipkina, 1961; E. M. Kudryavtseva, M., 1961., 1961., N.I. 1941, 1968; I. M. Solovyov, 1940, 1960, 1962, 1966, 1971; T. A. Grigoryeva, 1973; F. F. Rau, 1985; N. VLshkova, 1966, 1968, E., 199;., 19.

At the same time, a significant part of children with hearing impairment are children with hearing impairment, and hearing loss is greater or lesser. And in modern deaf psychology, there is a very limited amount of work devoted to the study of the features of the cognitive activity of children and adolescents with hearing impairment (E.I. Andreeva, 1973; I.L. Nikolskaya, 1979; R.M. Boskis, 1963.1968; G.L., Zaitseva. 1981; I.M.Gilewicz, 1973, 1980, 1981, 1982, 1986; K. G. Korovin, 1976, 1982; L. V. Nikolaeva, 1981; L. I. Tigranova, 1961, 1969, 1969, asam12, 1969, 1969, Asam111; other authors). Thus, the problem of studying the thinking characteristics of children with hearing impairment and, above all, children with hearing impairment remains relevant.

The specificity of thinking in children with hearing impairments is still a topic of discussion. Differences in the interpretation of this problem are mainly due to how different researchers understand the role of oral speech in the process of thinking.

Some foreign authors (Frohn, 1951; Myklebust 1960; Furth 1966, 1973) are characterized by insufficient assessment of the role of oral speech in the mental functioning of children with hearing impairments, accounting for the interaction of speech and thinking outside the developmental aspect. and changes in their relationship in the process of teaching the child.

P. Oleron (1977) shares the position of local researchers on the internal unity of thinking and speech, but reduces the importance of language as a weapon of thought, does not take into account changes in the relationship between thinking and speech. influence of learning.

Local deaf psychology L.S.Vigotsky's ideas about the relationship between thinking and speech developed under his influence, and the understanding of the connection between thinking and speech by local scientists as an internal unity of these processes made it possible to reveal many facets of this unity. characterization of internal speech as a mechanism of mental activity.

T.G.Bogdanova (2002) obrashayet vnimanie na to, chto u gluxix detey, kotorie ovladevayut slovesnoy rechyu gorazdo pozje slishashashix i na inoy sensornoy osnove, imenno v razvitii mishleniya nablyudaetsya znachitelno bolshe spesificheskix osobennostey, chem V razvitii drugix poznavatelnix processor. Dannie osobennosti proyavlyayutsya uje na geneticheski rannix stadiyax razvitia mishleniya[21].

T.G.Bogdanova (2002) focuses on the presence of significantly more distinctive features than the development of thinking in deaf children who adopt oral speech later than hearing and on a different sensory basis. other cognitive processes. These characteristics are already manifested genetically in the early stages of the development of thinking [21;22;23].

Some delays in deaf children in the development of visual-effective thinking were described by foreign psychologists in the mid-20th century (P. Aleron, 1953; J. Snijders, N. Snijders-Aomen, 1966). Later, N. VLshkova (1988) notes in her study that hearing impaired children have acquired the ability to solve visual-efficient tasks later than children with hearing loss. For the deaf, 9-10 years old, it is customary to use methods of movement characteristic of young children: imitation, copying. They do not have a generalized method of action to solve simple practical problems.

When moving on to the next stage - visual-figurative thinking - two interconnected conditions play an important role. The first condition is the formation in children of the ability to distinguish between the plan of real objects and the plan of images and models that represent these objects. The second condition is the development of speech. By mastering the signs of objects, their attributes, relationships, the child will have the ability to perform mental actions with images of objects (T.V. Rozanova, 1978).

Features of visual-figurative thinking of deaf children R.M.Studied by Boskis, 1963; J.I.Schiff, 1968; I.M.Solovyov, 1962, 1966; T.V.Rozanova, 1966, 1978, 1985, 1997; N.Vyashkova, 1966,1968,1988 and other authors.

N.V.Yashkova (1988) notes that some difficulties in the mental activity of deaf children also arise when solving relatively simple visual tasks. The main disadvantage of visual thinking activity in deaf children is that they have difficulties for a very long time in the transition from object active forms of intellectual operations to mental ones. This problem arises from the fact that the underdevelopment of speech prevents the formation of practical experience in Deaf Children, which is closely related to oral communication.

In the development of the verbal-logical thinking of a deaf child, a greater originality is observed in comparison with its development in hearing children. Oral-logical thinking is characterized by the use of concepts, logical structures that are formed and function on the basis of linguistic means. Consequently, the issue of the relationship between thinking and speech becomes more important (T.G.Bogdanova, E.B. Goleneva, 2000).

Currently, there are many works dedicated to the study of the verbal-logical thinking of deaf children. These Are The.M.Boskis, A.P.Gozova, L.V.Zankov, N.G.Morozova, I.M.Solovyov, L.I.K.G.Korovina, J.I.Schiff, G.M.Dulneva, E.M.Kudryavtseva, N.G.

In recent years, scientific studies have emerged at the neurophysiological level that prove a close relationship between hearing disorders, speech disorders, and verbal-logical thinking. Thus, M.N.Fishman notes that " with a defect in the auditory analyzer, first of all, the speech zones of the left hemisphere suffer ... The violation of speech development in this case also causes specific changes in abstract-logical thinking, which characterize the functions of the left. hemisphere" (M.N. .Fishman, 2003, p.4).

It can be assumed that the facts and laws of development of a deaf child's thinking, determined by researchers, are also characteristic of children with hearing impairment to one degree or another, with hearing loss to different degrees.

L.I.Tigranova noted that since children with hearing impairment are very diverse in the level of development of their speech-from speech consisting of individual distorted words to extended speech with small shortcomings - it is necessary to expect significant diversity in the level of development of their thinking. "The psychological study of the thinking skills of hearing impaired students should lead to the solution of Special Correctional educational issues, providing the basis for a more differentiated approach to this category of children, taking into account their intellectual characteristics.

The study of mental development is necessary in order to create the most favorable educational conditions that correspond to the real capabilities of the child, his individual characteristics, the level of General Development "(L.I. Tigranova, 1978, P.3).

The problem of studying the thinking characteristics of children with hearing impairment remains relevant at this time. There are not many works dedicated to this problem. The lack of a theoretical base affects the methodological and methodological level of work with children of this category. Practitioners emphasize the lack of scientific and methodological literature, new articles in periodicals devoted to the problem of thinking in children with partial hearing loss, methods of its diagnosis and Correction. There is currently almost no work in this direction.

In the 20th century, E.I.Andreeva, I.L.Nikolskaya, R.M.Boskis, I.M.Gilevich, K.G.Korovin, L.V.Nikolaeva, L.ITigranova, A.Bassam and several other authors. In 2003, T.V.Rozanova summed up the results of several studies on the cognitive field of schoolchildren with partial hearing loss.

L.I.Fomicheva (1979) found that visual problem solving for visually impaired junior school children presents significant difficulties, requiring the visual situation to be described using a recreating imagination, using a brief verbal description. It turns out that simple text, which is very convenient and understandable for the reader, characterizing the state of several objects in different places of the room, does not lead to a clear internal expression of its content.

Small schoolchildren still cannot imagine the relationship between objects in space on the basis of an oral description. There is a close connection between visual cognitive activity and verbal speech in the development of recreational imaginations of children with hearing impairment.

T.V.Rozanova (2003) notes that if, starting from the age of Primary School in children with hearing impairment, the comprehensive development of oral speech in the conditions of special education and all cognitive processes in their unity are carried out, gradually secondary and even. at a more senior school age, their mental development becomes closer to normal.

L.I.In tigranova's study devoted to the comparative study of the mental development of hearing and hearing impaired children of primary school age, "hearing impaired children are not inferior to hearing peers in distinguishing individual characteristics and characteristics. in objects. The success of qualification in color, shape, size is influenced only by the objective complexity of the task.

Hearing impaired children do not have great difficulty in classifying under two criteria compared to hearing children. Changing the forms of analysis, complicating its conditions (expanding the scope of analysis, changing its depth, etc.) leads to the fact that generalization processes occur at a lower level ”(L.I.Tigranova, 1978, p.89).

Significant differences between hearingand hearing impaired Junior School students are observed with the complication of forms of object classification. This is largely determined by the different role of speech in the process of their mental activity. In hearing children, in most cases, mental actions in the form of speech are ahead of the practical actions of its classification, planning and management. Difficulties in generalizing the method of completing the task in speech by children with hearing impairment create the need for additional external supports in the performance of the task (L.I.Tigranova, 1978).

Based on a comparison of the characteristics of the mental activity of first-graders with hearing and hearing impairment, L.I.Tigranova outlined the following criteria for assessing the intellectual capabilities of hearing impaired first graders:

1. First graders with hearing impairment can classify objects independently or on an exhibition basis by individual characters (color, shape, size) in no more than three cases to summarize them. With a decrease in the number of objects that are the basis for generalization, children with hearing impairment distinguish a common feature based on a single explanation.
2. Hearing impaired children perform a conceptual classification of objects (clothes, dishes, people, vehicles) independently or after an additional demonstration. If the classification is carried out on the basis of an explanation, then it is enough for students to help distinguish one of the rows from the classification criterion. Consequently, they have a wide transfer of the learned principle to the new material, which reveals the learning ability and potential of the student. Verbal generalization of conceptual classification is not available to all hearing-impaired children, even after explaining the principle of classification.
3. When classifying objects according to a combination of two characteristics, hearing impaired children learn the principle of classification after an exhibition or one explanation, as a result of which they easily move to new material. Hearing impaired children of the second section may not have verbal generalizations of classification criteria based on a combination of two characters.

When posting pictures with a series of plots, hearing-impaired children can compose three to four stories independently or on the basis of showing the first picture. If the number of links in sequential pictures increases, children with hearing impairment cope with the task with a single explanation of the first or first and second Pictures (L.I.Tigranova, 1978).

K.G.Korovin (1982), L.I.The research of Tigranova (1991) is devoted to the study of the logical thinking characteristics of hearing impaired children[99].

L.I.Tigranova emphasizes that the full development of abstract-conceptual thinking as the final form of the development of logical thinking depends entirely on the level of development of children's speech, and the success of the formation of logical operations is largely determined by the level of their participation. speech in the process of mental activity.

Therefore, "advancing the development of abstract-conceptual thinking in deaf and weak hearing children as a final task, we must always remember that achieving this goal can only be achieved if their speech is high enough. speech as the main means of mental activity " (L.I.Tigranova, 1991, pp. 3-4).

It is known that in order to comprehensively develop conceptual thinking, it is necessary to master a certain complex of logical concepts and actions, which includes the classification and identification of logical actions, logical connectives, logical words (quantities) and phrases, logical conclusions (conclusions) as necessary elements of students ' logical literacy, very necessary for the formation of logical thinking assimilation[99;100].

K.G.Korovin (1985) believes that the logics and actions that form the basis of logical literacy are not properly mastered until hearing-impaired students finish their elementary grade. He notes that underdevelopment of speech and insufficient formation of logical mental operations make it difficult to understand the mathematical relationships of younger students (mastering effective calculation, relationships between number and quantity, methods of performing arithmetic operations) [99;100].

Working with numbers that are not sufficiently mediated by quantities, and then by speech, negatively affects not only the assimilation of the mathematical concept of the number, but also the development of mental operations of analysis, synthesis, generalization, the formation of logical actions to distinguish properties. concepts and classification.

Insufficient formation of logical and mathematical skills in school children with hearing impairment was noted even in the middle and upper classes, difficulties in mastering mathematical knowledge, for example, fragmented perception of the task, violation of the thinking process, etc. the reason for many

difficulties for students in drawing up evidence, unreasonable conclusions, etc .in mastering mathematical knowledge is the lack of formation of a comparative operation (development of hearing impaired students..., 1985).

Features of mastering geometric material by children with hearing impairment are also characteristic (difficulties in building a drawing; violation of the logic of proof; skipping a link in thinking, unreasonableness of conclusions) (development of students with hearing impairment ..., 1985, pp. 7-8).

G.A.Zaitseva believes that" the geometric concepts of the majority of schoolchildren with hearing impairments do not reach the necessary level of generalization and are not adequate to scientific concepts " [72;73; P.107).

K.G.Korovin believes that the relationship between the level of assimilation of the school subject of schoolchildren with hearing impairment and the level of formation of logical forms of thinking is also clearly shown in the materials for studying the features of mastering such early chemical concepts. such as" substances“," pure substances and mixtures“," signs of chemical elements“," valence“," chemical formulas“," chemical equations". The experimental data obtained should be considered not only by hearing impaired people as an indicator of the degree of assimilation of these concepts, but also to a certain extent as a characteristic of the level of formation of logical thinking. [99;100].

Thus, in the development of thinking of children with hearing impairment, researchers note a huge number of specific features, which is due to the underdevelopment of their oral speech. Intensive teaching of the child to speech, replenishing and activating his vocabulary, working on pronunciation and grammar, as a rule, is not enough for the comprehensive development of thinking. Consequently, it is not enough to talk about their simple interdependence, but it is necessary to distinguish between the development of thinking and more subtle relationships between different speech functions.

Currently, D.B.The classification of speech functions proposed by Elkonin (1960) is generally accepted, according to which the nominative, regulatory and communicative functions of speech are distinguished.

Study of the development of the nominative function of speech in children with hearing impairment R.M.Boskis, A.P.Gozovoy, A.M.Goldberg, L.V.M.Solovyov, L.I.Tigranova, M.F.Titova, J.I.Schiff, F.F.Is the object of research of the Raus. , K.G.Korovina, A.G.Zikeeva, E.N.Kuzmicheva, L.P.Noskova and many other authors.

R.M.According to boskis, a violation of the nominative function of speech in children with hearing loss, as a rule, is very important and in most cases directly related to the degree of hearing loss [26].

Currently, insufficient attention is paid to the study of the regulatory function of speech of children with hearing impairment. It is known that the regulatory function of speech is not limited to the perception and implementation of adult guidelines aimed at regulating the behavior of the child. The regulatory function of speech is, first of all, the self - control of the child's process of activity, which requires the skills of transforming adult verbal instructions into self-education, which is carried out in the most perfect form in hidden, internal speech. speech.

T.V.Rozanova emphasizes the need for the participation of internal speech in order to successfully solve various problems, with the help of which the initial features that make up the condition of the problem and the relationship between them, as well as the intermediate results. the solution and its final effect are determined and installed in memory. Children with hearing impairment are less successful at solving problems than children with hearing, due to insufficient development of their inner speech as a means of thinking.

Natural and conditional gestures, as well as verbal signs, are less effective than internal oral speech (T.V. Rozanova, 1978). The skills of the verbal formulation of the strategy of the subject's own actions affect his ability to consistently solve problems, keeping his actions within the limits set by the experimenter.

When diagnosing the mental development of children with hearing impairment, it is necessary to take into account not only the features of children understanding the instructions proposed to them, but also

the above features of the development of the regulatory function of speech, including difficulties in the development of speech. translation of external speech into the internal speech of a child with hearing impairment, into the instructions for self-education necessary for the successful solution of problems. It can be assumed that high rates of intellectual development of children with hearing impairment are largely determined not by the degree of development of the nominative, but by the regulatory function of speech.

List of bibliography

1. Ravshanova. X.A., Avlayev O. U. Social of weak hearing adolescents dynamics of intelligence. Education and innovative research. Obrazovanie I innovativnie issledovaniya Education and innovative research. № 9, 2022. Sept. Issn 2181-1709 (p http://interscience.uz.
2. Ravshanova Hanifa Akmalovna - the specificity of the social intelligence of students with hearing influences. Asian Journal of Multidimensional Research ISSN: 2278-4853 Vol. 11, Issue 10, October 2022 A peer reviewed journal https://tarj.in
3. Mirzayeva Sayyora Rustamovna. Scientific Research Journal //Influence of social factors on the psychological development of adolescents, Volume 3, Issue 4, Aprel, 2022, Infakt factor 7.565, 463-466.
4. Mirzayeva Sayyora Rustamovna. ACADEMICIA:An International Multidisciplinary Research Journal //The role of isotherapy in art therapy, ISSN:2249-7137, VOLUME 12, Issue 09, September 2022, SJIF 2022,131-135.
5. Korovin K.G. Prakticheskaya grammar V sisteme spesialnogo obucheniya slaboslishashix detey yaziku. - M.: Pedagogy, 1976-225 P.
6. Boskis P.M. Gluxie I slaboslishashie deti. - M.: Izd-Vo APN RSFSR, 1963.-335 P.
7. Zaiseva G.A. Formirovanie geometricheskix ponyatiy U slaboslishashix shkolnikov / Osobennosti usvoeniya uchebnogo materiala slaboslishimi uchashimisya / pod red R.M.Boskis, K.G.Korovina. - M.: Pedagogy, 1981. -99-107.
8. Zack A.Z. Diagnostics vidov mishleniya U mladshix shkolnikov. - M.: Mo I PK, 1995.-86 P.
9. Educational and innovative research obrazovanie I innovativnie issledovaniya Education and innovative research № 9, 2022. Sept. Issn 2181-1709 (p http://interscience.uz.