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Pedagogical and Psychological Features of The Study of Agrammatic Dysgraphy In Children with Speech Disabilities

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Abstract: This article discusses children with speech impairments, the types of speech disorders they experience, speech characteristics, manifestations of dysgraphia, manifestations of dysgraphia, classification of dysgraphia forms and causes of written speech disorders, pedagogical and psychological features of studying agrammatic dysgraphia.

Keywords: Dysgraphia, agraphia, dysorphography, optical dysgraphia, act of writing, acoustic agnosia, written speech.

Introduction: From the point of view of the neuropsychological approach of A.R. Luria [6,7], dysgraphia is a consequence of insufficient analytical-synthetic activity of analyzers. Insufficient development of analyzers and inter-analyzer connections leads to insufficient analysis and synthesis of information, impaired recoding of sensory information: the transformation of sounds (phonemes) into letters (graphemes).

The founder of the psychophysiological mechanisms of writing is A.R. Luria [6,7]. Currently, his concept of the psychological structure of writing remains relevant, which is reflected in the work “Essays on the Psychophysiology of Writing”.

The psychomotor aspect of writing is studied by A.R. Luria [6], R.E. Levin [9], D.B. Elkonin [9], A.N. Kornev [5] and others.

Writing as a type of activity includes: symbolizing skills, modeling sound structure, graphomotor skills.

According to R.E. Levina [9], the skill of symbolism, i.e.

letter designation of phonemes, is formed on the basis of the development of the child's ability to symbolize a broader plan: symbolic play, pictorial activity, etc. In addition, its prerequisite is sufficient maturity of phonemic perception and language consciousness.

Modeling the sound structure of a word using letters. The implementation of this skill is carried out in two stages: first, the phonological structure of the sound side of the word is carried out, i.e. the establishment of a temporal sequence of phonemes, and then the transformation of the temporal sequence into a spatial sequence of letters.

Graphomotor skills are the final effector link in the chain of operations that make up writing. Their formation in ontogenesis undergoes significant evolution simultaneously with the development of visual activity. The most important function with which this process is associated is visual-motor coordination.

After reaching a certain level of maturity, all the necessary writing skills create optimal opportunities for performing operations in phonetic writing conditions.

The phonetic (phonemic) principle (graphics) of spelling is based on the sound (phonemic) analysis of speech. Words are written as they are heard and pronounced. According to the phonetic principle, the letter sign, regardless of whether it is in a strong or weak position, fully corresponds to the phonemes heard in the word ("write as you hear"). The writer analyzes the sound composition of the word and designates the sounds with certain letters.

Thus, in order to implement the phonemic principle of writing, there must be a well-formed phoneme differentiation and phonemic analysis.

Based on modern concepts, the mental structure of writing includes three levels [4]:

1. Psychological - involves the regulation of the writing process, the formation of writing motives. This level includes the following processes: the emergence of a writing motive, the creation of an idea for a letter, the creation of a general meaning of a letter based on thought, the regulation and control of the actions performed [7].

2. Psycholinguistic level - is responsible for ensuring the operational side of written speech. It includes:

2.1. Processing of auditory-speech information (identification of the meaningful properties of speech sounds, their sequence and quantity in a word, auditory-speech memory).

2.2. Processing of kinesthetic information (differentiation by type, kinesthetic analysis of graphic movements, processing of visual information).

2.3. Activation of visual images of letters and words (multimodal information processing, activation of visual-spatial images of letters, orientation of letter elements, letters themselves, lines in space, coordination of visual motor skills) [8].

3. Psychophysiological level - ensures the implementation of all of the above actions by activating various analyzers:

3.1. Differentiation of sounds - occurs due to the joint activity of the speech motor and acoustic analyzers.

3.2. The volume of perception of received speech - the acoustic analyzer is responsible for this action.

3.3. Recoding from phoneme to grapheme is provided by the interaction of acoustic, visual and spatial analyzers.

3.4. Recoding from grapheme to moving image is provided by the joint activity of acoustic, visual and spatial analyzers [2].

Insufficient formation of one or more of the above functions can lead to a persistent, specific violation of writing, that is, dysgraphia.

L.S. Svetkova's works [7] describe the impossibility of forming and developing writing and written speech skills in the absence of inter-analyst connections.

The psychological content of writing includes, in addition to speech, processes of perception of various modalities:

1. includes visual, acoustic and spatial processes, as well as movement processes;

2. kinesthetic and kinetic nature, visual images - images of letter symbols, operational memory [1].

A.R. Luria also described in his works that three main blocks (apparatus) of the human brain must interact in order to carry out mental activity[6].

The first block is an energetic block that maintains tone, which is necessary for the proper functioning of the cortex of the cerebral hemispheres, and the functioning of the energetic block occurs together with brain structures located under the cortex and in the body of the brain.

The second block is responsible for receiving, processing and storing information. The structures of the posterior sections of both hemispheres of the cerebral cortex are involved in ensuring the functioning of this block. Each section of the brain is responsible for receiving and processing a certain type of information: the occipital section - for vision, the temporal section - for hearing, and the occipital section - for general sensitivity.

The third block is the block of programming, regulation and control of activity. It is located in the anterior parts

of the cerebral hemispheres and its significant part is the frontal lobes.

Underdevelopment of the block of programming, regulation and control of activity can lead to the appearance of agrammatic dysgraphia. The child cannot follow the learned grammatical rules, cannot control himself even if he wants to.

Characteristic signs of the underdevelopment of the third block are also the child's inability to act according to the rules, according to the model, and not complying with general norms of behavior. The process of speech formation, including the assimilation of the lexical-grammatical structure, is presented in the works of A.R. Luria[6]; D.B. Elkonina[89]; A.N. Gvozdeva[3]; N.I. Zhinkina[7]; N.S. Zhukova[8]; G.V. Chirkina[5]; R.E. Levina[5], T.B. Filicheva[2].

A.N. Gvozdev in one of his works [3] identified the following stages of the development of the grammatical structure of speech:

Period 1 - the period of sentences consisting of amorphous root words. There are two stages in this period:

1. the stage of one-word sentences (1 year 3 months to 1 year 8 months);

2. the stage of sentences consisting of several root words (1 year 8 months to 1 year 10 months);

Period 2 - the period of mastering the grammatical structure of sentences.

This period consists of three stages:

1. the stage of formation of the first forms of words (1 year 10 months - 2 years 1 month);

2. the stage of using the inflectional system of the language to express syntactic connections of words (2 years 1 month - 2 years 6 months);

3. the stage of mastering words that perform the function of expressing syntactic expressions (2 years 6 months - 3 years);

Period 3 - the period of further mastering the morphological system of the language (3 to 7 years).

By the time a child completes the preparatory group for school education, he or she has mastered the entire complex system of practical grammar [123].

It is very important for a speech therapist to identify the manifestations of agrammatic dysgraphia as early as possible in order to prevent this disorder of written speech, as well as to carry out the most effective corrective work. Timely detection of disorders of oral and written speech is the prevention of psychological and personal disorders in a child [7].

The State Curriculum of the “First Step” preschool educational organization defines the child’s developmental competencies in the area of “Speech, communication, reading and writing skills”. According to this, a 6-7-year-old child, upon completion of educational activities, should be able to hear and understand speech; “use correct pronunciation, convenient grammatical forms and various sentence constructions in his/her speech; show interest in learning a second language; show interest in works of fiction; have an idea of the lexical, syllabic and phonetic structure of a word; independently construct and express various forms of meaning”[3]; know how to use the initial skills and tools of writing, and is aimed at developing in children a positive attitude towards correct oral and written speech, mastering the initial ideas about the norms of speech (orthoepic, lexical, grammatical) and speech etiquette. Preschool children with speech impairments should be able to navigate the goals, tasks, means, and conditions of communication, and choose adequate language tools to successfully solve communicative problems.

Writing itself represents a complex mental process, the mechanisms of which are directly related to verbal and non-verbal forms of mental activity [2]. Today, there is an increase in the number of preschool children with speech disorders, who have writing and written speech disorders. Writing disorders are called “dysgraphia”. Abroad, writing disorders combined with reading are called “dyslexia” or may be related to the concept of “diorphography”. Writing and written speech disorders usually arise from a combination of several groups of phenomena: biological underdevelopment of brain systems; environmental conditions; immaturity of mental functions [3]. A.R. Luria is considered the founder of the psychophysiological mechanisms of writing. In his opinion, 3 levels of the psychological structure of writing were identified, which a speech therapist must know in order to properly organize literacy classes at the stage of preparation for school education [5, 6]. The emergence of agrammatic dysgraphia may be associated with insufficient development of the third block - programming, regulation and control of activity. The child cannot follow the grammatical rules he has mastered, even if he wants to, and cannot control himself.

Analysis of psychological and pedagogical literature has shown that today there are several classifications of writing disorders. The classification specified by R.I. Lalayeva is considered the most justified, generally accepted classification in speech therapy [3]. This classification distinguishes the following five types of dysgraphia: dysgraphia (acoustic) due to impaired phoneme recognition; articulatory-acoustic dysgraphia; dysgraphia due to immaturity of the analysis and

synthesis of the speech flow; agrammatic dysgraphia; optical dysgraphia. In our study, we strictly adhered to this classification, since it is considered the most widely accepted and relevant in modern speech therapy. The above classification allows us to compare the type of dysgraphia with the mechanism of its occurrence and, therefore, determines the most optimal directions and methods of correction [1].

The description of dysgraphia is carried out on the basis of various criteria: analyzers take into account the violation of mental activity, the unformed registration operation.

Phonetically similar sounds appear in the alternation of letters. In this case, sounds are pronounced correctly in oral speech. Often, letters representing the following sounds: sonorous, sonorous and voiceless, are replaced by affixes (ch-t, ch-sh). This type of dysgraphia occurs as a result of incorrect pronunciation of consonants in a letter.

Dysgraphia, which occurs as a result of a violation of phonemic awareness, is often found in sensory alalia and aphasia. In severe cases, letters denoting long articulatory and acoustic sounds (l-k, b-v, p-n) are replaced. In this case, the pronunciation of sounds corresponding to mixed letters is the norm.

There is no consensus on the mechanisms of this type of dysgraphia. This, in turn, is associated with the complexity of the process of phonemic cognition.

The main purpose of examining written speech is to identify the mechanism, signs and etiology of reading and writing disorders. In the course of our experimental work, the degree, nature and types of disorders, as well as the direction of speech therapy, are determined.

In our research work, the child's vision, hearing, central nervous system, cognitive activity are taken into account.

In our research work, the following basic principles are taken into account: the principle of complexity, the principle of systematicity, the pathogenetic principle, the principle of activity, personality, development.

Written speech is based on oral speech. The child's auditory analyzer, visual analyzer function and fine motor skills of the hand should be good. It is also important to involve the child in educational activities, arouse interest in learning, and study the age and individual characteristics of children. In addition to the information provided by the medical and pedagogical commission, the speech therapist monitors the children, examines them in detail, and determines the level of readiness for learning to write beautifully. For this, the general level of development of each child with incomplete speech, pronunciation, vocabulary, reading and writing skills is determined.

Speech problems in children with dysgraphia can be identified and eliminated. Speech therapy is carried out with children with complex speech disorders. In the process of speech development, work is also carried out to identify, expand, enrich and activate the vocabulary of children with speech disorders. In the propaedeutic period, children's connected speech also develops. To ask questions about surrounding objects and phenomena, to strengthen conversational speech, conversations, excursions and observations are organized.

The activities of children with dysgraphia are based on what they do and what they want to do. In the group, preschool children should be taught to talk and write about what they see and hear outside of school

The better the child's general motor skills, the better his speech motility and fine motor skills of the hands. This means that in the pre-alphabet period, it is important to improve the child's motor skills, especially the fine motor skills of the hands.

The second part of the first group program is the alphabet. During this period, children with dysgraphia learn sounds and letters analytically and in context. The procedure for teaching sounds, letters, syllables and words in preschool educational institutions takes into account the phonetic characteristics of sounds in the Uzbek language, that is, the place of formation, method, pronunciation, syllable accumulation, etc., as well as the specific features of the development of your oligophrenic child.

Given the difficulty of teaching beautiful writing, it is important to organize your work from simple to complex.

In writing classes, children first learn to write with the correct strokes, loops, ovals and frames, then letter elements, uppercase and lowercase letters.

In preschool beautiful writing classes, cursive letters, syllables, typewriters, syllables, word tables and symbols should be used regularly. In the process of speech development, children are taught to work on fairy tales, poems, riddles, quick sayings, to develop the memory of children with speech impairments, to memorize, to perform small scenes. In preschool beautiful writing classes, children with speech impairments develop mental and oral speech skills by teaching them to analyze language material.

Children with speech impairments get acquainted with the phonetic structure of a word, the division of a word into syllables, into meaningful parts, information about certain word groups and their important signs,

sentences and fragments. information on specific topics, study spelling and punctuation.

The program pays special attention to introducing children with dysgraphia to the lexical meanings of words, polysemantic and similar-meaning words. At the same time, children with incomplete speech development develop the skills of listening to speech, communicating in the literary language, and are taught to consciously relate to the main features of the language - sound, writing, speech. The phonetic-phonemic nature, defects in general speech development and grammatical components observed in children with speech disorders make it difficult to master beautiful writing. Taking this into account, the program “Development of the mother tongue, reading and speech in preschool educational institutions” pays great attention to sound and letter analysis, work on vocabulary in all groups. Children with dysgraphia learn to recognize, pronounce, differentiate, analyze, and synthesize sounds, control the increase and decrease of sound, pause, and distinguish between vowels and consonants, sonorous and unsonorous sounds.

Children with dysgraphia learn the pronunciation rules of the literary language by listening to and pronouncing speech sounds, distinguishing them from each other. The program also focuses on developing spelling skills based on phonetic and morphological analysis of words.

Amaliy mashg‘ulotlar orqali nutq kamchiligiga ega bo‘lgan bolalar predmetlarning nomi, harakati va sifatini bildiruvchi so‘zlarga ega bo‘ladilar. So‘z voqelikdagi predmet yoki hodisani ifodalash orqali ma’no ifodalashi, gapda, ayniqsa, turdosh matnlarda yangi ma’nolar olishi, shakli jihatidan farq qiluvchi so‘zlarning bir xil yoki o‘xshash ma’noga ega bo‘lishi mumkin. Shuningdek, fikrni aniq ifodalash uchun ma’no jihatdan mos so‘z tanlash zarurligini anglab, ba’zi so‘zlarning ma’no jihatdan qarama-qarshi ekanligini bilib oling. Lug‘at mashqlari birinchi guruhdan boshlanib, undan so‘ng muntazam mantiqiy mashqlar bajariladi.

In preschool educational institutions, the sounds and letters of the alphabet are taught in four stages, from simple to complex[3].

Stage 1

Teach the sounds and letters Oh, Aa. Ii, Uu, Ll, Nh. Pronounce the sound correctly and clearly. Distinguish it from the beginning and end of the word. Learn to read from closed sounds (ol, il, un, at) to open syllables (lo, li, no, ta, etc.) and in one breath. Compare closed and open syllables and two-vowel words. Make words and phrases with them. writing, reading. In writing lessons, learn to write the first syllable of letters according to the rules of calligraphy.

Stage 2

Introduce the sounds and letters Tt, O ‘o‘, Mm, Ss, Bb, Hh, Dd, Kk. Identify and place newly learned letters in syllables, words (beginning, middle, end). Create open and closed syllables with two sounds, stretch them and read them together. Make and read words from open and closed syllables consisting of two sounds. (boy, bino. grandfather, lola, "Nabi, Soli, mana, parrot).

Three-syllable syllables, word formation and reading (tun, tut, non, bas, top, tom).

Getting acquainted with the printed and handwritten forms of newly learned letters, small handwritten forms of previously learned letters, teaching how to write correctly. Oral analysis, then syllable, then dictation.

Step 3

Getting acquainted with the sounds and letters Sh, Rr, Ee. Yy, Qq, Vv, Pp, Zz, Gg, teaching how to read and write them correctly in syllables, words and phrases. Find a word with a specific sound (at the beginning, middle and end of a word). Open and closed syllables! Word formation, words and sentences.

Read, analyze and compose sentences of two or three words. Get acquainted with the printed and written, uppercase and lowercase letters of the V sound, practice spelling uppercase and lowercase letters.

Copy and paste the text from the alphabet exercise into a handwritten form.

Explain the capital letter at the beginning and the period at the end, and practice writing correctly.

Independently form two- and three-syllable open and closed syllables from the crossed out letters, and then write.

Replace words with periods to replace words with periods. Practice copying and dictating syllables, words and phrases that follow the rules of grammar.

Step 4

Repeat, reinforce.

Introduce the new letters CH, Gg‘, Ff, Jj, Xx, (‘), practice separating vowels and consonants in the writing process. Build, read and write syllables and words with new vowels and consonants, first two, then three vowels. Introduce students to consonant syllables (mard, circus, table, chair, east), build words and sentences with related letters, read and write. Teach conscious reading by combining simple texts from alphabet exercises and other sources.

Learn to write people's names and surnames with a capital letter based on practical exercises. Analyze simple words, read sentences and write them under

dictation. Independent analysis of complex words, read and write compound letters. Copy and paste the necessary letters from the board and book. At the end of the alphabetic period, children with speech defects do not fully develop after four stages:

Vowels and consonants, whose pronunciation can be distinguished (air flow is blocked, does not occur);

Familiarity with the concepts of letter and sound relationships;

Ability to form words based on cut letters and syllables, correctly read compound words;

Learned to read syllabic words;

Is able to follow the hygiene rules that must be observed in the reading process;

Must know how to write uppercase and lowercase letters. The quality of writing in a child with speech defects, namely:

A) Connect letters correctly:

B) Write the letter at a 650 angle;

C) Achieve the same height of letters in each line:

G) The program requires the formation of letter elements, maintaining the same distance between letters and words.

To develop theoretical and practical understanding and skills about how to connect each letter or letters, explain orally or in writing, where to place a letter, where to turn or stop the movement, and where to place the letters along the writing line[33].

Teach them to read by first pointing to the letters represented by dots, and then following the pattern.

Learn to write letters based on imagination.

Spelling and spelling of one or more syllables of a word, sentences of 2-3 words.

Write words and sentences correctly. (Write the first word of the sentence with a capital letter, put a punctuation mark (period) at the end).

Write short dictations based on auditory and visual memory.

Reading skills

By the end of the school year, read a text of 20-25 words consciously and concisely;

Read one-syllable and two-syllable words in a simple structure;

The speed of reading an unfamiliar text is 10-15 words

Conduct educational work on the development of connected speech in children with speech disorders.

Drawing with children with speech defects;

• Repetition of educational materials studied in the alphabet lesson and extracurricular activities;

• Answering questions;

• Practical teaching of literary speech norms (in this area, the speech therapist and speech therapist should be an example for children with underdeveloped speech);

• Working on riddles, proverbs, sayings (based on the textbook and extracurricular reading materials);

• Working in small groups is mentally and intellectually useful for children whose group speech is not fully formed. Divide into groups of medium and weak reducers. Give groups tasks to solve problems, comment on group answers. Encourage;

• Encourage the development of the child's individual speech therapist (based on reading a new poem, story, fairy tale) to develop his own point of view; correct defects.

Memorize 3-4 simple poems with the help of a speech therapist.

Work on the dictionary. Enriching the speech of children with speech disorders, ensuring the active use of words that are rarely used in speech.

It is carried out in the second group of preschool education. The task of this period is to consolidate and improve the knowledge, skills and abilities acquired in the first group.

Thus, beautiful writing in preschool children is taught in the pre-alphabet and post-alphabet periods. In the alphabetic period of beautiful writing, letters are taught in four stages from simple to complex. All the knowledge, skills and abilities that children must acquire in reading and writing classes in the alphabetic period are purely educational and educational in nature. Perhaps this also has a corrective effect. In each session, the child's cognitive deficiencies are constantly addressed.

In this preschool educational institution, the methods of developing writing, reading, grammar and spelling, speech are described taking into account the goals and objectives of the preschool educational institution.

REFERENCES

Абдуллаева Г. «Чиройли ёзишга ўргатиш». Т.,2016 й.

Азова О.И. Дизорфография у младших школьников общеобразовательной школы // V Царскосельские чтения : науч.-теорет. межвуз. конф. с междунар. участием, 24-25 апр. 2001 г. / под общ. ред. В. Н. Скворцова. СПб., 2001. С. 7-10.

Арипова Ш.Д. Болалар нутқининг грамматик қурилишини ривожлантиришда коррексион-педагогик иш тизими: Пед.фан.бўйича. фалсафа

док.(PhD) дисс. Автореферати. – Т.:2018.-58 б.

Акрамова Х.С. Ақли заиф 4-5 синф ўқувчиларида меҳнат кўникмаларини шакллантиришда компьютер дастуридан фойдаланиш технологияси: пед. фанлари бўйича фалсафа доктори (PhD) диссертация. Автореферати. –Т., 2023. -49 б

Шомаҳмудова Р. Тўғи талаффузга ўргатиш ва нутқ ўстириш. – Т.: «Илм зиё» нашриёти, 2018.

“Ilk qadam” maktabgacha ta’lim muassasasining Davlat o‘quv dasturi. Ilk Qadam UZB final.pdf (mpe.uz)

Аюпова М.Ю. Логопедия. –Т.: Ўзбекистон файласуфлар миллий жамияти, 2007.