

Elimination Of Written Speech Disabilities Using Multimedia Technologies

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Abstract: This article highlights the shortcomings of written speech, the importance of computer technology in eliminating shortcomings in written speech of students with disabilities in mental development, the content of the use of basic effective computer programs.

Keywords: Written speech, correction, speech therapy exercises, program, computer technology, communication, speech skills.

Introduction: Written speech, and in particular, writing, is a complex mental process. Its psychophysiological structure is highlighted in the research works of A.R. Luria, L.S. Tsvetkova. The relationship between defects in written speech, oral speech and hearing impairments is described in the works of such scientists as F.A. Rau, M.E. Khvattseva, R.E. Levina. Defects in written speech in primary school students were highlighted in their research works by such scientists as L.N. Yefimenkova, I.N. Sadovnikova, R.I. Lalayeva, A.N. Kornev.

Currently, the problem of correcting various forms of dysgraphia in students with intellectual developmental disorders occupies an important place in speech therapy. However, speech therapy techniques are not enough to correct these defects (R.E. Levina, 1968, 1970; G.A. Kashe, 1957, 1979; N.A. Nikashina, 1959, 1959; R.I. Lalayeva 1978, 1983; E.F. Sobotovich, 1979, 1986; I.M. Plotkina, 1973,1978;). The disagreements that arise in the elimination of dysgraphia are due to the lack of a single point of view among researchers on the mechanisms of defects in written speech. This issue is still relevant today [6].

According to M.E. Khvatsev, V.V. Voronkova, it is noted that children with intellectual disabilities have more written speech defects than children with normal development. The reason for this is determined by the underdevelopment of cognitive activity, defects in oral speech, the underdevelopment of language generalizations, the underdevelopment of speech-hearing, speech-motor and visual analyzers.

At the same time, children with intellectual disabilities are characterized by the stability of written speech defects, which is directly related to the underdevelopment of cognitive activity, in which all mental processes are underdeveloped: perception, attention, memory, thinking, imagination.

The symptomatology of dysgraphia in this category of schoolchildren is characterized by a large number and variety of errors in writing and the complexity of their mechanisms (V.V. Voronkova, E.M. Gopichenko, E.F. Sobotovich), often manifested in a complex form, a combination of various forms (acoustic and articulatory-acoustic, etc.) [8].

Students with impaired hearing and memory have difficulty switching from one type of activity to another, they memorize a sentence of 4-5 words and have difficulty repeating it. Writing from memory based on auditory perception is one of the most difficult tasks for them. There are difficulties in perceiving the teacher's speech addressed to the class. They do not understand complex instructions.

The lack of visual attention, perception and memory prevents correct, conscious reading. Children make many mistakes when copying, cannot find errors when checking their written work, do not know how to use tables, posters, and samples provided in the textbook or on the blackboard.

Given the underdevelopment of phonemic perception, children with intellectual disabilities very slowly master syllable and sound-letter analysis. In the work of such

students, there are many different errors: omitting a letter, not writing words to the end, writing words with additional letters and syllables, changing letters and syllables within a word, gross distortion of words. Continuous writing of words, arbitrary division of words.

Work on eliminating these speech defects in mentally retarded students should be carried out in all academic subjects, but speech therapy exercises are of great importance in completely eliminating written speech defects. The use of a combination of traditional teaching methods and modern information technologies helps the speech therapist to solve this problem. New information technologies have become a promising tool for correctional and developmental work with children with defects in oral and written speech. Widespread computerization opens up new, unexplored learning opportunities. They are associated with the unique capabilities of modern electronics and telecommunications.

Classes on the correction of defects in written speech using multimedia technologies are both relevant and modern, they are interesting for children, serve as an additional incentive for self-development, help to eliminate speech defects, actively form the communicative qualities of a mentally retarded child and are a powerful and effective means of corrective influence.

In special literature, research issues related to the use of computer technologies in correctional work with students with developmental disabilities are addressed by E.P. Sineva, O.I. Kukushkina, A.Yu. Isakov, L.R. Muminova, M.Ya. Ayupova and others.

Currently, there is a huge stock of general developing interactive games and computer programs for children. We studied and tested the following educational programs in the correction process: the "Delpha – 141" speech therapy simulator, "Sentence", "Alphabet", "Speech therapy exercises", "Games for Tigers", etc. Interesting stories create a sense of play, which is very important for children, since the main goal of studying with computer programs is not only to master new knowledge and consolidate previously acquired knowledge, but also to emotionally liberate children, activate them and motivate them to work effectively [7].

One of the effective computer programs for eliminating defects in written speech is the specialized computer program "Alifbe". This program allows you to effectively organize work with children individually and in small groups. The program is based on the methods of teaching children who need special assistance (L.N. Efimenkova, G.A. Kashe, R.E. Levina, R. I. Lalayeva, etc.).

The computer program "Alifbe" fully takes into account the specific features of children's mastery of printed text, creates conditions for searching for new expressive means of children's creativity, and for the transition from ideographic writing to phonemic writing. Work using the computer program is carried out on the basis of visual perception and control of the results of the user's activity. In some exercises that cause difficulties, the possibility of additional reliance on hearing is provided. Thus, compensatory mechanisms are activated that allow the formation of stable visual-kinesthetic conditioned reflex connections of the central nervous system. In the process of speech therapy, correct speech skills are formed on their basis, and in the future, self-control of one's own speech. This allows you to effectively and quickly correct written speech disorders. This program consists of tasks such as determining the appearance of a letter, coloring a letter between an abstract drawing, writing an answer to a riddle, assembling a given word or phrase from letters, and determining the missing letter in a word.

The "Sentence" training program is also designed to eliminate deficiencies in written speech. As is known, the written speech of students with intellectual disabilities is accompanied by many spelling errors. This program allows you to form correct writing skills.

Speech therapy exercises to eliminate deficiencies in written speech can be carried out using Word, a text editor. Since children in need of special assistance often experience tension, fear of writing, and reluctance to improve these skills, the computer partially alleviates these problems, without turning the lessons into a process of continuous writing and rewriting. Working in a text editor is reminiscent of a literacy lesson - since the process of searching for the desired key is continuous, you have to speak out loud, articulate each sound. Thus, when working in a text editor, speech-auditory, speech-motor, and visual analyzers are activated. The motion analyzer begins to work at the level of finger movement along the keys, which helps to develop the child's fine motor skills. When letters, syllables, words, and phrases are written, the child has the opportunity to follow the line from left to right, which is important for students with writing disabilities. Word software helps the speech therapist make a diagnosis because it allows the child to save tasks completed by the child before and after the correction process at the beginning of the year in the computer's memory for visual comparison of results [7].

Recognizing that the computer is a powerful new tool for the intellectual and creative development of children, it should not be forgotten that it should only complement the teacher, and not replace him. In the

process of using computer technologies, we must not forget that in addition to education, it is very important to maintain the health of the child. Therefore, working with a computer should be planned as a stage of speech therapy, logically fit into its structure, and be relevant to the topic. It is recommended to include no more than two or three exercises on the computer in one lesson, since excessive diversity in work leads to inadequate emotional arousal.

When planning speech therapy classes using computer technologies, the following scheme can be used: one main exercise that meets the main objectives of the lesson and 1-2 exercises that solve auxiliary tasks. It is advisable that the duration of the stage of working with computer technologies in speech therapy classes should not exceed 5-10 minutes.

The use of interactive games and computer programs in the educational process can significantly reduce the time for the formation and development of language and speech, communication skills, higher mental functions. In addition, their inclusion in speech therapy classes allows you to individualize the correction process, take into account the educational needs of each child, which ultimately helps to increase the effectiveness of the correctional and developmental process. Thus, computer technologies are an effective technical tool with which you can significantly enrich the correctional and developmental process, stimulate individual activity and the development of children's cognitive processes, eliminate deficiencies in the child's written speech, and educate a creative personality adapted to modern life.

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