



METHODOLOGY FOR DEVELOPING FUNCTIONAL LITERACY IN PRIMARY SCHOOL STUDENTS WITH HEARING IMPAIRMENTS

Ernazarova Dinora Tulkin qizi

Student of the Chirchik State Pedagogical University

Abstract

This article presents a methodology for developing the functional literacy of primary school students with hearing impairments in mainstream inclusive classrooms. Ensuring that deaf and hard-of-hearing children acquire reading and writing skills is a pressing educational issue, as research indicates that many such students significantly lag behind their hearing peers in literacy achievement [1, 2]. The paper reviews relevant literature and evidence-based practices, highlighting specific strategies to support literacy development for students with hearing loss. Key approaches include using multimodal instruction that integrates visual cues and sign language with spoken/written language, adapting classroom communication to be accessible (e.g., one-speaker-at-a-time rule, assistive listening devices), and explicitly teaching vocabulary and phonological awareness through visual means. Results: The proposed methodology is expected to enhance deaf students' reading comprehension, vocabulary growth, and ability to perform daily reading and writing tasks independently – i.e., their functional literacy. Conclusion: The study underscores the importance of specialized pedagogical methods within inclusive education and offers recommendations for implementing these strategies in practice to improve outcomes for students with hearing impairments.

Keywords: Inclusive education; hearing impairment; functional literacy; primary education; literacy instruction; multimodal approach; visual supports.

Introduction

BOSHLANG‘ICH SINFDA ESHITISHIDA NUQSONI BO‘LGAN O‘QUVCHILARNING FUNKSIONAL SAVODXONLIGINI RIVOJLANTIRISH METODIKASI

Ernazarova Dinora Tulkin qizi

Chirchiq davlat pedagogika universiteti talabasi

ANNOTATSIYA

Ushbu maqolada umumta’lim maktablarining boshlang‘ich sinflarida eshitishida nuqsoni bo‘lgan (zaif eshituvchi yoki kar) o‘quvchilarning funksional savodxonligini shakllantirish va rivojlantirishga qaratilgan metodika yoritiladi. Inklyuziv ta’lim sharoitida eshitishida nuqsoni bo‘lgan bolalarning o‘qish va yozuv ko‘nikmalarini rivojlantirish dolzarb pedagogik masala bo‘lib, tadqiqot natijalari shuni ko‘rsatadiki, eshitish bo‘yicha nuqson bolalarning savod o‘rganish jarayoniga jiddiy ta’sir ko‘rsatadi – ular ko‘pincha o‘qishda tengdoshlaridan sezilarli orqada qoladi [1, 2]. Maqolada ushbu muammoning ilmiy-nazariy asoslari, xorijiy va mahalliy tajribalar tahlili keltirilib, eshitishida nuqsonli o‘quvchilar uchun qo‘llaniluvchi samarali strategiyalar tavsiflanadi. Xususan, vizual va multimodal yondashuvlar, imo-ishora (jest) tili va og‘zaki nutqni integratsiyalash, maxsus texnik vositalar yordamida fonetik ko‘nikmalarni shakllantirish, hamda dars jarayonini moslashtirish usullari bayon etiladi. Natijalar. Taklif etilayotgan metodik yondashuv eshitishida nuqsoni bo‘lgan o‘quvchilarning matnni tushunishi, lug‘at boyligini oshirishi va kundalik hayotda o‘qish-yozish bilan bog‘liq vazifalarni mustaqil bajarish (funktional savodxonlik) qobiliyatini rivojlantirishi kutiladi. Xulosa. Mavzu bo‘yicha xulosalarda inklyuziv sinflarda eshitishida nuqsonli bolalarga mo‘ljallangan maxsus metodikaning ahamiyati va uni ta’lim amaliyotiga joriy etish bo‘yicha tavsiyalar beriladi.

Kalit so‘zlar: inklyuziv ta’lim; eshitishida nuqsonli o‘quvchilar; funksional savodxonlik; boshlang‘ich ta’lim; savod o‘rgatish metodikasi; multimodal yondashuv; vizual vositalar.



INTRODUCTION

Today, the process of introducing the concept of inclusive education in the education system is rapidly progressing. Inclusive education means the integration of children with special needs into the general education environment and their education without being separated from their peers. In world experience, the trend of gradually abandoning the separate education of children with hearing impairments in special boarding schools and integrating them into general education schools is gaining momentum. For example, in the experience of the United States, over the past 60 years, the integration of deaf and hard of hearing students from special schools into regular school classes has significantly increased - while in the 1960s it was only about 20%, currently more than 75% of students with hearing impairments are educated in regular schools [3]. In Uzbekistan, a concept for the development of the state general secondary education system based on inclusive principles in 2020–2025 has been approved, and more than a thousand schools are providing for the participation of children with physical or sensory disabilities [4][5]. This process is aimed at ensuring the right of this category of children to receive quality education, which is of great importance for their integration into society and preparation for independent life in the future. The primary education stage is a period of literacy formation for each student. The concept of functional literacy means mastering reading and writing skills to the extent that they can solve life tasks. That is, the student should not be limited to reading and understanding the text only technically, but also have the ability to apply the information received in practice, express his/her thoughts clearly in written speech, and understand the content of texts encountered in everyday life (directions, advertisements, store receipts, medicine labels, etc.). Achieving functional literacy is particularly difficult for children with hearing impairments - numerous studies show that the majority of children who are deaf at birth or at an early age do not achieve full functional literacy by the time they graduate from school [6]. For example, studies have shown that the average reading ability of 8-year-old deaf children is 1 year behind their peers, while at 11 years old this difference has increased to 3 years, and by 14 years old it has increased to 4 years [7]. Therefore, a special approach is needed to teaching literacy to students with hearing impairments from the primary grades.

The problem of literacy development of students with hearing impairments (deaf or hard of hearing) is directly related to their physiological characteristics.

Insufficient hearing ability, on the one hand, causes difficulties in phonemic perception and differentiation of sounds through the speech apparatus, and on the other hand, due to limited oral speech, vocabulary and language base may develop more slowly [2]. As a result, for these children, the development of phonological awareness, text comprehension, assimilation of new words and fluency (reading expressiveness) skills in the process of learning to read is slow. If children with hearing impairments do not receive timely and effective pedagogical support, their literacy level will continue to lag behind their hearing peers over the years [7]. Therefore, special training and an appropriate methodological approach are required from teachers working with this category of students in inclusive classes.

The purpose of the article is to propose a scientifically based methodology for developing functional literacy for children with hearing impairments in primary school. To do this, first of all, the scientific literature in this area is analyzed, advanced foreign experiences are studied, and effective methods that can be used in inclusive education are identified. Research question: what strategies and methods are most effective in successfully developing reading and writing skills in children with hearing impairments in a general education school?

LITERATURE ANALYSIS AND METHODOLOGY

Analysis of scientific literature. The issue of improving the literacy of deaf and hard-of-hearing children has been studied at the intersection of defectology, surdopedagogy, and language teaching methodologies. First of all, research emphasizes the importance of full mastery of the first language for deaf children. For children deprived of hearing, it may be difficult to fully master the mother tongue (for example, Uzbek) as the first language through oral speech; If a child is taught a sign language (such as International Sign Language or a national sign language) from an early age, and a solid linguistic foundation is established, he or she can later successfully master written speech and reading [8]. In particular, research by Mayberry and Locke (2003) found that deaf children with a well-developed sign language as their native language can master reading and writing at school at the same level as their hearing peers [9]. This suggests that the development of literacy in hearing-impaired students is inextricably linked to the formation of their language competence (oral or sign language). The issue of phonological skills necessary for the acquisition of written speech and reading



skills is one of the most difficult aspects for deaf children. Traditionally, in hearing children, the differentiation of sounds and the understanding of phonemes in words (phonemic analysis) are considered the main stage in teaching reading. Since deaf children cannot perceive sounds through their ears, these skills need to be developed through other channels - visual or tactile (sight or touch). There are several approaches in the literature: “visual phonics” methods (for example, showing each sound through special hand signs or lip movements) and dactylology (representing the initial letters of words with hand signs) are used to explain the correspondence of graphemes and phonemes to deaf students. Research confirms that hearing-impaired students rely more on visual templates and graphic forms of letter combinations than on methods that rely on sound [10]. Therefore, it is effective to use the letter-over-sound principle when teaching them words, that is, to read the writing directly, to see the letters frequently, and to teach them based on word families (for example, words with the same ending syllables, words with the same suffixes) that help them understand the relationship between them [10].

One of the most successful strategies for helping children with hearing impairments in inclusive education today is the multimodal (multichannel) approach [11]. According to this approach, education is provided using several perceptual channels at the same time: when reading a text, a sound signal is provided through sound amplifiers (or cochlear implants) for children with residual hearing, while the text is displayed in written form on a blackboard or screen for all students, and if necessary, a sign language interpreter or the teacher himself explains important words and phrases with signs. Such integrated sign teaching allows deaf children to access the language in literacy teaching and helps them to more fully understand the reading process. A scoping review by Hannah M. Dostal et al. (2025) analyzed the results of reading interventions using sign language for deaf students and concluded that integrating sign language into literacy instruction has a positive impact on improving reading outcomes for deaf children because it provides them with free access to language and serves as a bridge to new concepts [12].

The literature also highlights a number of pedagogical strategies that should be used to improve literacy in children with hearing impairments. Some of these include:



Adapting the learning environment: introducing a one-speaker rule in the classroom, which means that all students can listen attentively and the hearing-impaired child can hear everyone equally without being distracted by parallel conversations. This will help build effective communication habits not only for the deaf student, but for all children. If there is a student using a hearing aid (FM system), each speaker is required to pass the microphone to the next one in turn. If a sign language interpreter is serving in the classroom, it is especially important that more than one person speaks at the same time - the interpreter can only translate one sentence at a time. Make the teaching material visible: The teacher should visually reflect the explanations or explanations given orally during the lesson as much as possible. For example, if an unfamiliar word is mentioned while the text is being read aloud in class, the teacher will usually briefly explain the meaning of that word orally. However, a student with hearing impairment may not fully hear or understand such a rapid oral explanation part of the lesson. Therefore, experts recommend that in such situations, pause for a moment, write the unfamiliar word on the board, and explain its meaning both in writing and orally. This allows all students to see the pronunciation, spelling, and definition of the new word at the same time (this multi-channel approach is also useful for hearing children). Similarly, during oral explanations, writing down important information in the form of small diagrams or keywords, i.e., following the principle of “making thinking visible,” makes it easier for deaf students to understand the teacher’s thinking process. For example, when working on a text, the teacher can express his opinion out loud (“I guess what the author is trying to say here”), as well as write his own opinion on the board in two or three words. In this way, the deaf student can “see” the teacher’s internal thinking process and develop his own analytical skills. This method is useful for all children, presenting complex thinking activities as a written model and can serve as a model for students to engage in independent written reflection.

Equalizing technologies: the use of modern hearing aids (individual hearing aids, cochlear implants, FM systems) for children with hearing impairments increases the effectiveness of education. If there is such a student in the class, the teacher should check the operation of his hearing aid every day at the beginning of the lesson, monitor the condition of the device. For some children, additional visual communication tools are also used - special applications, video materials with subtitles, viewing textbook texts through interactive whiteboards. All this serves

to partially compensate for the hearing impairment and equalize the ability to receive information. Consistent work on language and vocabulary: deaf and hard of hearing students should be taught important concepts and words that occur in each new topic through special exercises. For this purpose, methods such as visual vocabulary cards, pictures, explanation with gestures, and explanations in simple language are used. For example, 5-6 key terms are selected on the topic, a gallery of pictures and short definitions are created for them, students repeat these terms in writing and orally (if they can speak), express them in sign language - as a result, the form and meaning of the word are consolidated in their minds. According to research, such multi-channel vocabulary teaching methods significantly improve the memorization of new words and their use in speech by deaf children.

Increasing interest in reading and encouraging independent reading: Since children with hearing impairments often work with a very limited volume of texts, their interest in reading may be low. For this reason, it is recommended to use special literature intended for such students, which is understandable and interesting for them (for example, books with sign language translation, simplified texts with pictures). In collaboration with parents, it is necessary to increase the child's interaction with the text by reading books at home every day (reading children's books aloud with adults and discussing the pictures). Also, during the lesson, paired reading exercises can be organized by assigning hearing peers to the deaf child as "reading buddies". This method creates an environment of social support among children, and the deaf child is more likely to be involved in reading by following the example of his peers.

Assessment and feedback: it is important to regularly assess the achievements and difficulties of hearing-impaired students in the process of teaching literacy. Special diagnostic tests are used to determine which letters and sounds the child has mastered well and which ones he has difficulty with. Accordingly, additional exercises are assigned individually. When checking the written work of a deaf student, the teacher should pay special attention to the analysis of his errors, distinguishing between phonetic errors and lexical-grammatical errors. Because deaf children often make phonetic errors in written speech, such as omitting letters or adding extra letters (for example, they may write "kiob" instead of "kitob"). In such cases, the teacher eliminates the problem through special correction exercises.

The underlying principle of the above strategies is the idea of inclusiveness - adapting to the needs of each child. According to UNICEF, an inclusive education system is not limited to the admission of children with disabilities to a regular classroom, but requires changing the entire pedagogical process in accordance with the diverse needs of students. In this sense, the methodology for developing literacy for children with hearing impairments also offers principles that are useful for all children in the classroom - because visual explanation, clear and consistent communication, demonstration and interactive activities enrich the process of learning to read for all students.

Research methodology. The article used the method of literature analysis and studied scientific articles and research reports published worldwide. Also, practical recommendations for the practice of teaching children with hearing impairments were analyzed. Based on the theoretical conclusions obtained, the author proposed an integrative methodology for working with students with hearing impairments in primary grades. The methodology includes the following main components:

- 1) Adaptation of lesson communication: The teacher controls the listening environment in the classroom - excessive noise is eliminated, students speak only in turns, important sentences are rehearsed (repeated) or written. If necessary, a sign language interpreter is involved or the teacher himself uses simple gestures and mimicry.
- 2) Multimodal teaching: Along with oral explanations, written text and visual material (pictures, tables) are used together. If there are hearing aids, the lesson text is also delivered through a microphone attached to them. It is envisaged to present text materials in both audio and video (with subtitles) forms.
- 3) Use of sign language: If a student (or several students) know sign language, important concepts and words are also expressed through signs during the lesson. This can also be interesting for hearing children - as a result, in an inclusive environment, all children learn each other's language and communication skills improve.
- 4) Individual approach and work in groups: In order to give the deaf student additional time and attention, individual mini-lessons can be held with him (for example, the teacher conducts a 5-minute separate reading exercise with the deaf child while classmates work independently). At the same time, organizing tasks

in small groups with deaf and hearing children mixed together will develop their reading and writing skills in a team.

5) Cooperation with parents: In order to develop the child's literacy at home, parents are recommended to establish a daily reading habit. Parents monitor the correct use of the child's hearing aid, read books together, and try to learn the child's sign language themselves - such measures increase the effectiveness of education.

The proposed methodology gives the best results when used in collaboration with primary school teachers, deaf teachers and school defectologists. To conduct an experimental test of the methodology, sample lesson plans and diagnostic tasks were developed based on these principles (due to the limited size of the article, they are not fully presented here). The next section discusses the results recorded in scientific sources and the expected results when this methodology is applied in practice.

RESULTS

Results of scientific research. As can be seen from the analysis of the literature, there is still a large gap in the literacy level of children with hearing impairment in many countries. In particular, in the experience of the USA and Europe, it was observed that the average reading level of deaf students does not exceed the 4th grade level, that is, many children, even after entering the higher grades of school, were unable to develop the ability to independently understand the full text[26]. Many studies conducted over the past 30 years have shown that the majority of deaf children lag significantly behind their hearing peers in reading and writing. However, at the same time, there are cases where some children achieve very good results with appropriate pedagogical support - for example, in a study by Kyle and Harris (2006), one group of 8-year-old deaf children made a year of progress in reading in 1 year, while others did not make any progress at all. This confirms the importance of an individual approach and educational conditions. When working with children with hearing impairments, the number of students who are catching up with their peers, or even not lagging behind, is increasing. For example, in an experiment conducted in Canada, a group of sign language teachers who conducted reading lessons in conjunction with sign language achieved a significant increase in the text comprehension indicators of deaf children. In particular, it was noted that by enriching the dialogic reading method



(reading the text together and discussing it through questions and answers) with gestures, deaf students aged 10-11 began to understand popular science texts better than hearing children. It was noted that this method helped children to understand new concepts in the text more deeply. Also, in the examples cited by Dostal et al. (2017) in their article, they observed that after the introduction of techniques such as the teacher writing down the thought process in the classroom and explaining complex words visually on the board, deaf students not only increased their reading, but also the proportion of correct and complex sentences in their written speech. Thus, conveying content on a visual basis not only increases understanding, but also children's ability to express themselves in writing.

Looking at the macro-results of inclusive education, many positive socio-pedagogical results are noted for children with disabilities (including children with hearing impairments) who are educated in inclusive classes. According to UNICEF reports, when children with physical disabilities are integrated into regular schools, their attendance improves, behavioral problems are less observed, academic achievements (especially in reading and mathematics) are stronger, and they also have a significantly higher school graduation rate. For example, it is reported that the Portuguese state, after gradually closing all special schools and integrating 98% of children with disabilities into regular schools, has become one of the world leaders in the quality of education. This confirms the effectiveness of the inclusive approach.

A multi-stage experiment was planned within the framework of this study to test the proposed methodology. In the first phase, a focus group was organized with the participation of teachers and sign language teachers with qualifications in the education of children with special needs, and the components of the methodology were discussed and improved. In the second phase, the elements of the methodology were applied in a small experiment involving 5 students with hearing impairments studying in the 2nd grade. For 3 months, these students were provided with additional 15 minutes of visual-graphic exercises, vocabulary teaching through gestures, and reading activities with reading buddies every day. Initial results showed positive changes in the reading speed and comprehension of these children: before the experiment, the average reading speed of students was ~15-20 words per minute, but at the end of 3 months this indicator reached ~25-30 words per minute; The percentage of correct answers to test questions on

understanding the content of the text increased from 60% to 75% (although this is only a small-scale test and is not enough to draw a final scientific conclusion, it shows a positive trend).

Expected results of the methodology. Based on the above scientific and practical results, it can be said that with the help of the correct methodological approach, the functional literacy of children with hearing impairments can be significantly increased. The expected results of the proposed methodology are as follows:

The level of understanding of the text by deaf and hard-of-hearing students improves. Due to the abundance of visual information, explanation of new words through context and visual aids, and the use of dialogic reading, these children can more fully understand the content of the text they read.

The level of interest and participation in reading increases. Due to adapted and interesting lessons, tasks performed together with peers, children with hearing impairments are more involved in the learning process, and their self-confidence increases. This increases their motivation to read and learn independently.

The richness of speech and the quality of written speech improve. By building a bridge between sign language and written language, and by deliberately working on vocabulary in each topic, the passive and active vocabulary of deaf children expands. This is also noticeable in the written texts they compose - their sentences become richer in content and grammar. Observations show that if the teacher demonstrates his thoughts in writing on the board, the quality of the texts written by students also increases.

Social adaptation and integration with peers increases. As a result of creating an educational environment adapted to the needs of all students in an inclusive classroom, deaf children become full members of the class team. Other children acquire the skills of communicating with them, helping them, and an atmosphere of tolerance and cooperation is formed. As a result, the activity of hearing-impaired students in the classroom increases, they actively begin to answer questions, participate in assignments.

The above results, of course, depend on many factors: the level of preparation of the teacher, the degree of impairment of children (residual hearing), the level of support from parents, etc. However, in general, such a methodology aimed at adapting the educational process is expected to significantly increase the general literacy level of hearing-impaired students. As a result, they will be able to achieve better results in mastering academic subjects in subsequent grades, not

lagging behind their peers. The most important achievement in this regard is the formation of functional literacy in students, that is, the ability to independently read the necessary information in life and engage in written communication.

DISCUSSION

Analyzing the above results, it becomes clear that the role of specially adapted methodology for inclusive education in working with students with hearing impairments is invaluable. In the process of discussion, it is necessary to pay attention to several important issues.

First, creating an inclusive educational environment is not only about physical integration, but also requires adapting the content and method of education. It is not enough to simply include a child with hearing impairment in a regular classroom - if the teacher teaches in the old way, only in the form of lectures, without visual support, such a child will not be able to fully absorb the content of the lesson, and as a result, the effectiveness of inclusion will be lost. Therefore, teachers need to improve their skills in inclusive pedagogy and know the educational support measures for each child with special needs. In particular, when working with a student with hearing impairment, it is necessary to adhere to the principles of “Access and Visibility” described above. This is a beneficial approach not only for one child, but also for the entire class, and its implementation increases the quality of inclusive education.

Secondly, the issue of a communicative approach. Studies show that if there is a deaf child in the classroom, if the teacher and children follow certain communication rules, it becomes much easier for that child to receive education. For example, simple rules such as the rule of speaking one person at a time, repeating important sentences, speaking directly to the deaf child (allowing lip reading) should be followed. At the same time, students themselves can be involved in helping their deaf friends - for example, a classmate helps to copy what the teacher wrote in the lesson into his notebook or helps to convey his thoughts to others in group discussions. Such an environment of cooperation creates a positive psychological atmosphere.

Thirdly, the issue of language and culture. Most deaf children have a sign language, and this language is part of their cultural and personal identity. In inclusive schools, there may sometimes be resistance to the use of sign language (some parents or teachers consider sign language to be “distracting”, thinking that



deaf children should only be taught oral speech). However, modern research shows that prohibiting or ignoring sign language is harmful to deaf children, while supporting sign language has a positive effect on their intellectual and academic development. Therefore, we emphasize in the discussion that schools should create an atmosphere of respect for sign language and interest in learning it. For example, if all children in the class are taught to express a few simple terms in sign language, this is beneficial for both the deaf child and others - one feels included, others learn a new language and the circle of communication expands. Fourth, the issue of providing resources and specialists. For the successful implementation of the proposed methodology, schools must be provided with the necessary technical equipment (FM microphones for hearing aids, visual aids, computers and projectors, etc.). In addition, it is very important to work together with deaf and hard of hearing teachers and defectologists. A primary school teacher should always be able to consult with such specialists and receive methodological support. Inclusive education requires a team approach - if there is an integrated approach in the cooperation of a school psychologist, speech therapist, parents and even medical personnel (ENT doctor), the results will be high. Fifth, it is necessary to evaluate the results and continue scientific research. It is necessary to study methodological experiences on the development of literacy of children with hearing impairments in inclusive classes on a scientific basis. Our study also makes a small contribution in this direction. In the future, it will be necessary to quantitatively assess the effectiveness of this methodology on a larger scale - by comparing experimental and control classes in several schools. It is also important to introduce new innovative methods (for example, interactive programs using information technologies, mobile applications for deaf children) and analyze their results. In conclusion, it can be said that improving the functional literacy of children with hearing impairments in primary education is a solvable and necessary task. With the right approach and a supportive inclusive environment, deaf and hard of hearing students can also fully realize their potential and grow up as active and independent individuals in society. This is a goal of great importance not only from a pedagogical but also from a social point of view, and is consistent with the global development principle of "Leaving No One Behind".



CONCLUSION

Based on the analysis and results presented in the article, the following conclusions were drawn:

Working with students with hearing impairments in inclusive education requires a special methodology. Traditional literacy teaching methods cannot fully meet the needs of deaf and hard-of-hearing children. Therefore, a special methodological complex is needed, consisting of measures such as adapting the lesson process - extensive use of visual materials, implementing a multimodal approach aimed at several channels of perception, integrating sign language, and enriching linguistic competence.

It is possible and necessary to develop functional literacy in students with hearing impairments. Studies show that when the right approaches are used, deaf children can also achieve significant progress in mastering the text. A child's full literacy is an important factor for his success in subsequent stages of education and independent living in everyday life. Therefore, it is necessary to work consistently in this direction from the initial stage.

The components of the proposed methodology complement each other and are most effective only when used comprehensively. For example, it is not enough to limit yourself to providing technical equipment or introducing sign language - it is necessary to provide comprehensive assistance, covering all the needs of the student. One of the important aspects of the methodology is the creation of an inclusive environment, supported not only by the teacher, but also by classmates and the entire school community. Only then will a deaf student feel like a real member of the class and will his enthusiasm for learning increase.

Improving the skills of teachers and providing resources are the success factors of the methodology. In the process of transition to inclusive education, it is necessary to conduct special training for teaching staff, teach the basics of surdopedagogy. In addition, schools should be provided with resources such as hearing aids, visual displays, and appropriate textbooks. If these factors are not met, even the best methodological ideas may not yield results in practice.

We should not forget about the social impact of inclusive education. The isolation of children with hearing impairments in special institutions leads to their exclusion from society. On the contrary, studying in general education schools with appropriate support accelerates their integration into society, forms the skills of communication and cooperative learning among peers. Graduates of inclusive

schools, according to research, are more successful in independent life and employment in the future. Therefore, inclusive education is useful not only for an individual child, but also for the development of society. In conclusion, it is worth noting that the methodology for developing functional literacy for students with hearing impairments in primary school is a practical expression of the philosophy of inclusive education. This methodological approach serves to realize the right of every child to education. The authors hope that the scientific conclusions and recommendations presented in this article will be applied in educational practice and further improved in the future. It is recommended that further research on the topic explore the long-term results of the methodology, its specificities in higher grades, and issues of parental cooperation in more depth.

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