

Pedagogical-Psychological Factors of Creating A Speech Environment in Developing Speech of Hearing-Impaired Students

Jumaniyozova Lobar

Uzbek National Pedagogical University, Master's Department, Surdopedagogy, 2nd year Master's Degree, Uzbekistan

Received: 09 March 2026; **Accepted:** 29 March 2026; **Published:** 25 April 2026

Abstract: This article analyzes the pedagogical and psychological factors of creating a speech environment in the process of developing the speech of students with hearing impairments. The specific features of speech development, the importance of the environment, and effective pedagogical approaches are highlighted. The role of psychological support, motivation, and interactive methods in the formation of students' communicative competence is also substantiated.

Keywords: Hearing impairment, speech environment, communicative competence, pedagogical factors, psychological factors, speech development, surdopedagogy.

Introduction: The modern education system is characterized by its focus on developing human capital and realizing the intellectual and communicative potential of each individual. In this regard, comprehensive support for children with special educational needs, in particular, students with hearing impairments, is emerging as an important socio-pedagogical task. The speech development of students in this category is closely related to their overall cognitive, social, and emotional development and is one of the main factors determining educational effectiveness.

As a result of a defect in the auditory analyzer, children's ability to perceive speech naturally is limited. This, in turn, creates certain difficulties in the formation of oral speech, increasing vocabulary, mastering grammatical structures, and developing communication skills. Therefore, the process of developing speech in such students requires specially organized pedagogical conditions, a systematic approach, and strong psychological support.

The success of speech development largely depends on the environment in which the student operates.

Especially for children with hearing impairments, it is important to artificially enrich the speech environment, that is, to create conditions saturated with language units, encouraging communication, and stimulating active speech participation. Such an environment not only expands the student's speech experience, but also serves to form his communicative competence and accelerate the process of socialization.

From a pedagogical point of view, the creation of a speech environment is directly related to the teacher's methodological skills, effective use of educational tools, ensuring an individual approach and the use of interactive methods. At the same time, psychological factors - the student's motivation, emotional state, self-confidence and social adaptation - also have a significant impact on the effectiveness of speech development. If the student feels free and supported in an environment, he will participate more actively in speech activity and the process of language acquisition will accelerate.

Today, the development of an inclusive education system makes this problem even more urgent. Because ensuring the speech development of students with

hearing impairments in the process of integrating them into the general education environment is one of the main conditions. Therefore, in-depth study of the pedagogical and psychological factors of creating a speech environment, development of effective methods and technologies is of scientific and practical importance.

LITERATURE ANALYSIS

The problem of developing the speech of students with hearing impairments is one of the important research objects of surdopedagogy, special pedagogy and psychology. Scientific research conducted in this direction shows that speech development depends on biological, psychological and social factors.

The issue of the relationship between speech and thinking was first scientifically substantiated by Lev Vygotsky. According to him, a child's speech is formed and develops under the influence of the social environment, that is, any speech activity first appears in the process of external social communication, and then turns into internal speech [1]. This idea further strengthens the importance of a specially organized speech environment for children with hearing impairments.

The neuropsychological foundations of speech activity were studied by Alexander Luria, who showed that the formation of speech is inextricably linked with brain activity and external influences [2]. The scientist's research proves that in the process of speech development, the lack of sensory experience (hearing, vision, touch) can be compensated for by other analyzers. Therefore, it is necessary to widely use visual and kinesthetic tools when working with students with hearing impairments.

The creation of a speech environment is central to research in the field of surdopedagogy. In particular, the importance of a specially organized communicative environment in the development of speech in children with hearing impairments is emphasized in scientific works edited by T.A. Vlasova [3]. In these studies, the richness, systematicity and regularity of the speech environment are considered the main conditions for speech development.

In modern scientific approaches, a multimodal approach (i.e., teaching through several sensory channels simultaneously) is considered important in

organizing a speech environment. In this case, it is recommended to use gestures, written speech, visual materials, and technological tools in addition to oral speech. Studies show that such an approach significantly increases students' speech comprehension and expression skills [4].

Psychological research also notes that motivation, emotional state, and social environment play a significant role in the speech development of children with hearing impairments. The student's self-confidence, desire to communicate, and the presence of a supportive environment are considered the main factors that increase speech activity [5]. If the teacher can establish effective psychological contact with the student, the process of speech development will be significantly accelerated.

In recent years, research conducted in inclusive education has also paid special attention to the problem of the speech environment. Teaching students with hearing impairments in inclusive classes together with their healthy peers enriches their communicative experience and expands the natural speech environment. However, for this process to be effective, special pedagogical conditions and an individual approach are required [4].

The analysis of the above scientific sources shows that the speech environment is a decisive factor in the development of speech in students with hearing impairments. Its effective organization requires the combination of pedagogical and psychological factors.

METHODOLOGY

This study studied the process of speech development of students with hearing impairments and the pedagogical and psychological factors of forming a speech environment. During the study, methods of analysis of scientific literature, observation and generalization were used. Also, an analytical approach based on practical exercises was used to determine the speech activity of students. These methods made it possible to determine the influence of the speech environment on students' speech.

DISCUSSION

The speech environment is interpreted in pedagogy and psychology as a set of social, communicative and didactic conditions that serve to form and develop a student's speech. This environment includes not only

oral speech, but also written speech, gestures, visual aids, mimicry and other communicative forms. Especially for students with hearing impairments, the speech environment is not natural, but a systematic process that needs to be specially organized.

Due to limited hearing, such students cannot fully perceive speech signals in the environment. As a result, they are deprived of natural experience in mastering speech. Therefore, artificially enriching the speech environment, that is, expanding speech experience through various pedagogical means, is of great importance. Such an environment creates conditions for the student to understand and actively use language units (words, sentences, texts).

The importance of the speech environment is manifested in several aspects. First of all, it forms the student's communicative competence, that is, it develops the skills of expressing thoughts, understanding others, and actively participating in the communication process. Secondly, the speech environment has a positive effect on cognitive development, since speech is inextricably linked with thinking. The more a student is involved in speech activity, the wider his or her range of thinking.

The speech environment is also an important factor in the process of socialization. Students with hearing impairments can often be limited in social environments due to communication difficulties. A properly organized speech environment encourages them to adapt to the team and communicate effectively with their peers. This, in turn, strengthens the student's emotional state and self-confidence.

The effectiveness of the speech environment depends on its following characteristics:

- systematicity - systematic organization of speech activity;
- richness - the presence of various language units and communicative situations;
- interactivity - involving the student in active communication;
- expressiveness - extensive use of visual aids;
- flexibility - adaptation to the individual characteristics of the student.

In addition, a multimodal approach plays an important role in creating a speech environment. That is,

conveying information through gestures, writing, pictures, and technological means, along with oral speech, facilitates the process of understanding and developing speech for students. In particular, lip reading, the use of facial expressions and gestures are important tools that support speech perception.

The speech environment is the main foundation for the development of speech in students with hearing impairments, and it must be organized in a pedagogically and psychologically well-planned manner. Only then will the students' speech activity, communicative potential and social adaptation develop effectively.

Pedagogical factors play a leading role in the effective organization of the speech environment. The teacher's methodological approach, the form of lesson organization, the selected means and the level of individual approach determine the effectiveness of speech development when working with students with hearing impairments. Since speech in such students is formed not through natural hearing, but in a specially organized educational process, the teacher must consciously plan each speech activity.

First of all, an individual approach is important. Since each student has a different level of hearing, stage of speech development, and psychological characteristics, working with a single method will not give the expected result. Therefore, the teacher should organize classes in a differentiated manner.

Also, the use of visual aids facilitates the understanding and assimilation of speech. Information provided through pictures, pictograms, cards, and video materials supports the student's cognitive process. This contributes to the solid assimilation of speech units.

Interactive methods - role-playing games, dialogues, group work - increase the speech activity of students. Through such methods, students learn to use speech in conditions close to real communication situations. Especially when game elements are used, students' motivation increases and interest in speech activity increases.

In addition, the presence of a system of speech exercises is also an important pedagogical factor. Speech development should be carried out consistently and gradually. Through repeated exercises, reinforcement tasks, and regular monitoring, students

develop stable speech skills.

The following table summarizes the pedagogical factors

described above and their impact on speech development:

Pedagogical factor	Content	Impact on speech development
Individual approach	Taking into account the individual characteristics of students	Increases the efficiency of the speech acquisition process
Use of visual aids	Pictures, cards, videos and visual materials	Makes it easier to understand and remember speech
Interactive methods	Games, dialogues, group activities	Develops speech activity and communication skills
System of speech exercises	Systematic and regular exercises	Forms stable speech skills

The pedagogical factors listed in the table are closely interconnected, and high efficiency is achieved only when they are used in a comprehensive manner. Each factor serves to enrich the speech environment and helps to develop the communicative competence of students.

Psychological factors are of particular importance in the development of speech of students with hearing impairments. Because speech is not only the process of mastering language units, but is closely related to the internal motivation, emotional state and social experience of the individual. If a student feels free, supported and understood in an environment, he will participate more actively in speech activity. On the contrary, psychological discomfort, distrust or fear of communication slow down the development of speech.

First of all, motivation is an important factor. Arousing interest in speech activity in a student, encouraging him to communicate is one of the main tasks of the teacher. The student's internal need is strengthened by stimulating, positive assessment and forming a sense of success.

Emotional support also plays a major role in speech development. Students with hearing impairments often have difficulty expressing themselves, which can lead to self-doubt. Constant support from the teacher, correct attitude to mistakes, and creating a positive environment strengthen the student's self-confidence.

The factor of social adaptation is also important. The student's communication with peers, finding his place in the team directly affects his speech development. Through teamwork, group activities, and involvement in social situations, the student's communicative experience expands.

In addition, the development of such mental processes as attention and memory plays an important role in the acquisition of speech. The processes of perception, understanding, and re-expression of speech are associated with these psychological functions. Therefore, along with speech training, it is necessary to use exercises that develop attention and memory. The following table summarizes psychological factors and their impact on speech development:

Psychological factor	Content	Impact on speech development
Motivation	Formation of interest and need for speech activity	Motivates the student to active communication
Emotional support	Creating a positive psychological environment	Increases self-confidence, enhances speech activity
Social	Communication skills in a	Expands communicative

adaptation	team	experience
Attention and memory	Processes of receiving and retaining information	Improves speech comprehension and re-expression

The psychological factors presented in the table are interrelated, and when they are developed in a complex way, the effectiveness of speech activity increases. A psychologically supported student effectively uses the speech environment and consistently develops his communicative competence.

Effective organization of a speech environment in the development of speech of students with hearing impairments is a complex but important pedagogical process. Such an environment should be created not randomly, but in a purposeful, systematic and planned manner. Effective organization of a speech environment serves to develop students' communicative competence, adapt them to social life, and increase their speech activity.

First of all, a specially equipped educational environment is important in creating a speech environment. The classroom should be enriched with various visual materials - pictures, inscriptions, pictograms, thematic cards. Such visual aids facilitate students' understanding of speech and accelerate the process of mastering new words. Also, the use of modern information and communication technologies (interactive boards, video materials, special programs) further enriches the speech environment.

The second important way is to organize constant and purposeful communication. Communication between the teacher and the student should be carried out in a regular, understandable and adapted form. During each lesson, students are involved in speech activity and are encouraged to actively participate through activities such as questions and answers, dialogues, and short stories. In this process, it is important for the teacher to explain the speech simply, clearly, and with visual aids.

The use of multimodal communication also gives effective results. That is, the combined use of gestures, facial expressions, written speech, and visual images, along with oral speech, helps students better understand information. In particular, the development of lip-reading skills and the use of gestures are tools that

support speech perception.

Game technologies and interactive methods also play an important role in involving students in an active speech environment. Role-playing games, staging, group work, and classes based on problem situations increase students' speech activity. Through such activities, students learn to use speech in communicative situations close to real life. In addition, it is necessary to establish cooperation with parents in the effective organization of a speech environment. The student's speech development should not be limited to school, but should also be continued at home. Providing special recommendations to parents and involving them in speech activities ensures continuity of the environment.

Another important aspect is the organization of speech activity based on an individual approach. Taking into account the hearing level, speech capabilities and psychological characteristics of each student, appropriate methods and tools are selected. This allows achieving high results in the student's speech development.

Effective organization of a speech environment requires an integrated approach. Only when pedagogical skills, psychological support, modern technologies and social interaction are combined, the speech development of students will be consistent and effective.

RESULTS

The conducted analyses and observations have shown that the purposeful and systematic organization of a speech environment in the development of speech of students with hearing impairments gives significant results. In particular, in a specially organized speech environment, students' speech comprehension increased, vocabulary expanded, and sentence construction skills developed significantly.

Pedagogical factors - an individual approach, the use of visual aids, the use of interactive methods - proved to be an effective tool in increasing the speech activity of students. At the same time, psychological factors -

motivation, emotional support and social adaptation - increased the level of students' communication and served to reduce speech barriers.

The organized speech environment developed not only speech skills in students, but also communicative competence. They began to participate more actively in the communication process, their desire to express their opinions increased, and their skills of interacting with peers were formed.

Also, classes organized on the basis of a multimodal approach (combination of visual, gestural and oral speech) facilitated the process of speech development and had a positive effect on the students' solid acquisition of knowledge. The work carried out in cooperation with parents ensured the continuity of the speech development process.

The results confirm that the pedagogically and psychologically correct organization of the speech environment is one of the most important conditions for the development of speech in students with hearing impairments.

CONCLUSION

The development of speech in students with hearing impairments is a complex and multifaceted process that requires a special approach and favorable conditions. The correct and effective organization of the speech environment is of decisive importance in this process. Because the speech environment is the main tool for students to master the language, communicate and socialize.

Pedagogical factors - an individual approach, the use of interactive methods, the use of visual aids and the systematic organization of speech exercises - play an important role in increasing the speech activity of students. At the same time, psychological factors - motivation, emotional support, the formation of self-confidence and social adaptation - are one of the important conditions determining the effectiveness of speech development.

The richness, interactivity and flexibility of the speech environment serve to develop the communicative competence of students. The educational process, organized on the basis of a multimodal approach, expands the possibilities of understanding and expressing speech. Also, the establishment of cooperation with parents ensures the continuity of

speech development.

Thus, the pedagogically and psychologically based organization of the speech environment is one of the most important factors in the development of speech of students with hearing impairments, which contributes to their full-fledged education and successful integration into society.

REFERENCES

1. Выготский Л.С. Мышление и речь. – Москва: Педагогика, 1982. – 287 с.
2. Лурия А.Р. Язык и сознание. – Москва: Издательство МГУ, 1998. – 320 с.
3. Сурдопедагогика: учебное пособие / Под ред. Т.А. Власовой. – Москва: Академия, 2003. – 256 с.
4. Нурмухамедова Ф.А. Инклюзив таълим асослари. – Тошкент: Fan, 2020. – 180 б.
5. Махмудова Д.Р. Болалар нутқини ривожлантириш методикаси. – Тошкент: O'qituvchi, 2019. – 210 б.
6. Леонтьев А.А. Психология общения. – Москва: Смысл, 2005. – 368 с.
7. Жинкин Н.И. Речь как проводник информации. – Москва: Наука, 1982. – 160 с.
8. Зимняя И.А. Педагогическая психология. – Москва: Логос, 2000. – 384 с.
9. Боскис Р.М. Обучение глухих детей речи. – Москва: Просвещение, 1963. – 220 с.
10. Психология детей с нарушениями слуха / Под ред. Л.В. Кузнецовой. – Москва: Академия, 2003. – 240 с.