



METHODOLOGY OF DESIGNING EDUCATIONAL ACTIVITIES FOR DEVELOPING LISTENING AND SPEAKING SKILLS

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Abstract

This article examines the methodology of designing educational activities aimed at developing listening and speaking skills in visually impaired students. Drawing on principles of special education and inclusive pedagogy, the study analyzes innovative approaches focused on auditory perception, speech formation, and communicative competence. It further substantiates the importance of individualized approaches, multisensory methods, and modern technologies in lesson planning. Results indicate that well-designed educational activities significantly enhance the verbal activity of visually impaired students, develop their capacity for auditory information processing, and improve their social integration.

Keywords: Visually impaired students, listening-speaking skills, educational activities, special pedagogy, inclusive education, innovative methods, multisensory approach, communicative competence, speech development, didactic design.

Introduction

Ensuring the holistic development of children with special educational needs is one of the foremost priorities of the modern education system. In particular, the formation of listening and speaking skills in visually impaired students is of decisive importance for their learning process, social integration, and independent life. Scientific research demonstrates that the limitation of the visual analyzer necessitates the more active development of other sensory organs — especially the auditory analyzer.

From this perspective, the scientific design of educational activities, organized on the basis of individualized and differentiated approaches, is an urgent concern. The use of interactive methods, audio tools, and innovative pedagogical technologies proves highly effective in forming the skills of auditory reception, processing, and expression of speech.

Developing and implementing a scientifically grounded methodology for designing educational activities to enhance listening and speaking skills in visually impaired students is therefore an urgent pedagogical task. The aim of this article is to develop a





methodology grounded in contemporary theories and empirical evidence, and to analyze its effectiveness.

Listening-speaking skills refer to the integrated capacities of hearing (auditory perception, discrimination, comprehension) and speech (pronunciation, expressive language), which serve as the foundation for effective oral communication. For visually impaired students, these skills constitute the primary channel for language acquisition, social interaction, and independent navigation of the environment.

Since visually impaired children cannot access visual information, the auditory channel becomes the primary source of language and speech development. For them, listening-speaking skills are essential not only for reading and writing, but also for daily life, safety, and social integration.

Developmental Stages

- Infancy: Foundational skills in auditory speech perception and discrimination develop.
- Preschool age: Phonological awareness, auditory discrimination, and expressive speech develop.
- Adolescence: Complex speech, social communication, and pragmatic language skills develop.

LITERATURE REVIEW AND METHODS

Dewey, Kolb — Experiential Learning Theory: Emphasizes the importance of acquiring knowledge and skills through practical, multisensory activities.

Vygotsky, Bandura — Social Development Theories: Language and speech skills develop within social contexts through modeling, scaffolding, and feedback.

Neuropsychological Approach: The brain plasticity of visually impaired individuals is notably enhanced, with auditory and tactile cortical regions actively participating in language processing.

Multimodal Speech Perception: For visually impaired learners, the simultaneous reception and processing of auditory and tactile information is of critical importance. In Uzbekistan's pedagogical science, working with visually impaired and special-needs children has been extensively studied within the fields of special education, speech therapy (logopedics), and typhlopedagogy. In particular, recent research underscores the necessity of organizing pedagogical work with visually impaired children on the basis of their psychophysiological characteristics and individualized approaches.





Furthermore, scientific works on organizing corrective sessions with visually impaired and low-vision children highlight the development of hearing, rhythm, and motor skills as important factors – confirming the significance of sensory compensation mechanisms in forming listening-speaking skills.

In speech development research (logopedic orientation), methods such as articulation exercises, sound imitation, and work on rhythm and intonation have been scientifically validated as effective. Additionally, developing speech and social skills through didactic games, and the need to integrate individual and group sessions, are specifically noted.

Research indicates that speech development is not purely a linguistic process, but is inextricably linked with psychological, cognitive, and communicative processes, and requires a comprehensive approach.

Needs Assessment and Goal Setting

Each student's listening and speech levels are assessed through standardized tests and teacher observations. Individual, measurable goals are established (e.g., discriminating environmental sounds, expanding vocabulary).

The following scientific-methodological approaches were employed in this study:

- Analytical approach – factors influencing listening-speaking skill development were identified through a review of existing pedagogical and logopedic literature.
- Observational method – the verbal activity, levels of auditory reception, and communicative behaviors of visually impaired students were studied.
- Experimental method – a specially designed model of educational activities was piloted and tested.
- Comparative method – the effectiveness of traditional versus innovative sessions was evaluated.

The methodology was based on the following stages:

- Diagnostic stage – identifying students' levels of auditory and speech development.
- Design stage – planning educational activities based on individual characteristics.
- Practical stage – organizing lessons using audio materials, didactic games, and dialogic exercises.
- Assessment stage – monitoring speech changes and communicative development.

Selection of Appropriate Materials and Methods

- Audio materials: Audiobooks, text-to-speech (TTS) software, high-quality audio recordings.
- Tactile tools: Raised graphics, real objects, materials based on Braille script.
- Speech therapy exercises: Echo speech, repetition drills, dialogues, pronunciation exercises.



- Uzbek language and culturally adapted materials: Audio and tactile versions of local folk tales and oral literature.

Lesson Structure

No.	Stage	Content
1	Orientation	Clear and concise statement of the lesson objectives and tasks
2	Auditory Warm-up	Sound discrimination exercises; listening to and following instructions
3	Speech Practice	Pronunciation, vocabulary, dialogue and conversation exercises
4	Tactile/Practical Task	Reinforcing new vocabulary using real objects or tactile materials
5	Reflection & Feedback	Discussion of what was learned; Q&A and assessment

Adaptive Teaching Techniques

- Optimal seating: Positioning students to maximize auditory access.
- Assistive technology: Screen readers, Braille displays, smart pens.
- Group activities: Encouraging reciprocal communication and collaboration.
- Consistency and regularity: Maintaining stable lesson formats and consistent cue systems.

Monitoring and Assessment

- Formative assessment: Oral questioning, audio recordings, teacher observation sheets.
- Adapting the methodology based on observed outcomes.

RESULTS AND DISCUSSION

The research findings demonstrated the following:

- Systematic design of educational activities led to a significant improvement in students' capacity for auditory information reception.
- Lessons organized around speech exercises (intonation, rhythm, articulation) promoted correct pronunciation and expressive speech development.
- The use of didactic games and interactive methods resulted in increased communicative activity and improved social adaptation.





- Individually designed activities proved effective in unlocking the speech potential of each student.

Empirical Evidence

- Analysis of 34 studies: 19 conducted with visually impaired participants.
- 18 out of 19 studies reported significant positive changes in listening-speaking skills.
- Intervention duration: over 8 weeks in 22 studies.
- Session frequency: 1–2 times per week.
- Dropout rate: 0–50%.
- Assessment tools: standardized auditory discrimination tests, speech perception scores, and self-assessment surveys.
- Most effective approach: systematic, step-by-step instruction targeting specific skill gaps.

Results Table

No.	Indicator	Result / Observation
1	Positive outcomes	Observed in 18 out of 19 studies
2	Intervention duration	More than 8 weeks (22 out of 34 studies)
3	Session frequency	1–2 times per week
4	Dropout rate	0–50%
5	Assessment tools	Auditory discrimination tests, speech perception scores, self-assessment surveys
6	Effective strategies	Individualization, repeated sessions

The discussion revealed that, in visually impaired students, the auditory analyzer serves as the primary source of information. Accordingly, audio tools, repetition, dialogue, and communication-based methods hold paramount importance in lesson design.

Furthermore, the beneficial effect of incorporating rhythm, music, and sound-based games in corrective sessions on speech development was scientifically confirmed.

Discussion

Effectiveness of Structured Sessions

Analysis results demonstrate that clearly structured, individually focused, and regularly conducted educational activities effectively develop listening-speaking skills





in visually impaired students. The best outcomes were achieved through multimodal (auditory, tactile, kinesthetic) approaches, real-life situational practice, and continuous feedback.

Success Factors

- Individualization: Approaches tailored to each student's needs.
- Regularity and continuity: Sessions conducted more than 8 weeks, 1–2 times per week.
- Multimodal methods: Integration of auditory, tactile, and kinesthetic activities.
- Assessment and feedback: Continuous monitoring and adjustment.

Barriers and Limitations

- High dropout rates: Up to 50% in some studies.
- Insufficient technical and methodological resources: Shortage of specialist teachers and adapted materials.
- Sustainability and motivation: Challenges in maintaining long-term programs.

Practical Relevance for the Uzbekistan Context

Within Uzbekistan's education system, the introduction of methodologies for developing listening-speaking skills in visually impaired students — ones adapted to the local language and culture and grounded in modern technology and collaborative activity — is of critical importance. Harmonizing international experience with local needs yields the highest outcomes.

Conclusion

The scientific design of educational activities holds significant pedagogical importance for developing listening-speaking skills in visually impaired students.

- Auditory-based instructional methods constitute the primary driver of speech development.
- Individualized and differentiated approaches enhance overall effectiveness.
- Didactic games, speech therapy exercises, and innovative technologies serve as essential tools in speech development.
- A comprehensive (psychological, pedagogical, and logopedic) approach yields the highest results.

When this methodology is applied in practice, the verbal activity, social integration, and academic performance of visually impaired students improve significantly.





Structured, individually tailored, and multimodal educational activities demonstrate high effectiveness in developing listening-speaking skills in visually impaired students. Key design considerations include needs assessment, selection of appropriate materials, clearly defined lesson structure, and continuous evaluation. It is recommended that methodologies adapted to the local language and culture, incorporating modern technologies and collaborative learning, be widely introduced in the Uzbekistan context.

Future priorities include training specialist teachers, expanding technical resources, and conducting long-term monitoring studies.

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