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Implementation of Flashcard-Based Speech Guidance to Develop the Speaking Skills of Children with Hearing Impairments at SLB Sumber Dharma

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Abstract

Children with hearing impairment often experience delays in receptive and expressive language due to limited access to auditory input, which affects their articulation, vocabulary, and social communication. This study aimed to describe the implementation of speech therapy (bina wicara) using flashcard media to develop the speech ability of a child with hearing impairment at SLB Sumber Dharma, Malang. A descriptive qualitative approach was used, involving one 12-year-old student as the subject. Data were collected through observation, interview, documentation, and a performance test, then analyzed descriptively based on an Individual Learning Program (Program Pembelajaran Individual/PPI). The intervention combined visual attention, articulation modelling, imitation, and drill techniques using flashcards depicting familiar objects. The results showed that the child's pronunciation of words ending in vowels improved noticeably, while words ending in consonants remained difficult to articulate. The child also became more attentive, cooperative, and confident during the sessions, although speaking volume in daily communication was still relatively soft. These findings indicate that flashcard-based speech therapy combined with an individualized program can support the speech development of children with hearing impairment.

Keywords: hearing impairment; speech delay; flashcard media

1. Introduction

Communication skills influence children's social interaction, cognitive development, and learning success. However, due to limited access to auditory input, children with hearing impairment often find it difficult to acquire language spontaneously, causing their speaking ability to develop more slowly than that of children with normal hearing (Sutanto & Sudarman, 2025). Research by Zaskia et al. (2025) also shows a strong correlation between hearing impairment and delayed language development in children, especially when treatment is delayed, which affects articulation difficulties, the pronunciation of certain words, and the use of inappropriate speech volume in daily communication. In line with this, Winarti et al. (2019) found that children with hearing impairment have difficulty pronouncing certain phonemes due to a lack of practice and habituation in oral speech.

This communication barrier also affects children's social and academic development. Children with limited communication skills find it difficult to interact with their environment, understand conversations, and express their wishes (Nariswari, 2025), which in turn can reduce their self-confidence and make them more passive both socially and academically. Anggraeni et al. (2019) found that speech stimulation provided from an early age can improve

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the language ability of deaf children, so this kind of intervention is important to carry out as early as possible. Hendarmin (1992) stated that speech development barriers in children with hearing impairment can hinder their socialization and personality development, so appropriate intervention steps are needed to help children develop their communication ability to the fullest.

Speech guidance (bina wicara) is one form of intervention used to help children with hearing impairment overcome communication barriers through listening, articulation, vocabulary, and functional communication exercises aimed at improving their receptive and expressive language ability. The American Speech-Language-Hearing Association (ASHA) defines speech therapy as a professional service that uses a methodical, evidence-based approach to help individuals overcome communication difficulties. Methods such as Auditory Verbal Therapy (AVT) have been shown to help children use their residual hearing to improve speech and language ability (Mustaqim et al., 2026), while early intervention, the use of hearing aids, family involvement, and regular, sustained practice also determine the effectiveness of speech guidance (Astalia, 2026). This is reinforced by Badiah et al. (2020), who showed that Auditory Verbal Therapy (AVT) training effectively develops the language ability of deaf children through optimal use of residual hearing.

Based on the above description, this study aims to describe the implementation of speech guidance activities, the design of the Individual Learning Program (Program Pembelajaran Individual/PPI), the process of implementing speech guidance activities at school, the results of its evaluation, and the supporting factors and obstacles encountered in carrying out speech guidance activities for children with hearing impairment using flashcard media at SLB Sumber Dharma.

2. Method

This study used a descriptive qualitative approach to describe the implementation of speech guidance activities for a child with hearing impairment using flashcard media, from the initial assessment and the preparation of the Individual Learning Program (PPI) through to the implementation of the intervention and its evaluation results.

2.1 Type and Approach of the Research

This research is a descriptive qualitative study aimed at narratively describing the implementation of speech guidance activities for a child with hearing impairment, based on data obtained through observation, interviews, documentation, and a performance test.

2.2 Subject and Location of the Research

The research was conducted at SLB Sumber Dharma with a child, initialed MI, male, aged 12, in the sixth grade of elementary school, as the subject. Speech guidance activities were carried out once a week for 30 minutes per session, referring to the Individual Learning Program (PPI) prepared according to the child's needs and characteristics.

2.3 Instruments and Data Collection Techniques

The main instrument of this research was visual documentation of the learning activities, used to observe the interaction between the teacher and the child, the use of flashcard media, and the child's responses and participation during learning. Data were

collected using four techniques: (1) direct observation of articulation, the pronunciation of final word sounds, and the child's use of speaking volume; (2) interviews with teachers at SLB Sumber Dharma regarding the development of the child's articulation, oral, and verbal communication ability; (3) documentation in the form of photos and videos of the intervention activities; and (4) a performance test, in which the child was asked to verbally name the objects shown on the flashcards while attention was paid to articulation, clarity of pronunciation, and the ability to imitate the words modeled by the teacher.

2.4 Data Analysis Technique

Data were analyzed using descriptive qualitative analysis. The intervention combined visual attention, articulation modeling, imitation, and drill techniques to help the child understand and imitate word pronunciation gradually. The visual attention technique was used to focus the child's attention on pictures and the teacher's lip movements, articulation modeling was carried out by clearly demonstrating mouth movements, the imitation technique involved asking the child to imitate the teacher's pronunciation, and the drill technique was used as repetition practice to make the child's pronunciation clearer. The results of the performance test were not assessed with a specific score but were instead analyzed based on the clarity of pronunciation, the ability to imitate words, responses to instructions, and the development of the child's speaking ability during the intervention, which was then described narratively.

3. Results and Discussion

3.1 Result

Speech guidance activities were carried out based on the Individual Learning Program (PPI) prepared according to the child's needs and characteristics, with flashcards as the main visual medium, since the child found it easier to understand concrete, visual information than abstract explanations. The activity was conducted once a week for 30 minutes, consisting of an opening activity (greeting using sign language, eye contact, and explaining the learning objectives using flashcards), a core activity (visual attention, articulation modeling, gradual imitation from syllables to whole words, and drill and reinforcement in the form of praise), a brief reflection, and a closing activity consisting of joint repetition and the assignment of homework to be practiced with parents.

Based on interviews with teachers at SLB Sumber Dharma, the child's oral speaking ability was rated as good, even standing out compared to peers, with a loud, clear voice when reciting the Quran, although the volume tended to be softer in daily communication. Phonologically, the child was able to pronounce words of up to three syllables reasonably well and was more fluent with words ending in vowels, but still had difficulty with words ending in consonants. During the implementation of speech guidance using flashcards, the child was able to understand instructions, concentrate on the pictures and the teacher's lip movements, and gradually imitate word pronunciation from syllables to whole words, accompanied by increasing self-confidence when attempting new words through repetition and encouragement from the teacher.

3.2 Discussion

The results of using flashcards in this speech guidance program are consistent with visual learning theory, which holds that children with hearing impairment absorb information more easily through visual stimuli than through auditory stimuli (Arsyad, 2017). The child appeared to understand pronunciation more easily when visual aids such as flashcards and demonstrations of the teacher's lip movements were used throughout the practice, in line with the findings of Zaskia et al. (2025) that children with hearing impairment benefit greatly from a multimodal approach and visual support in language development. This is further supported by Amin et al. (2023), who found that word-card (flashcard) media effectively improves the vocabulary mastery of deaf students, as well as by Putri (2017), who showed that picture word cards can improve the ability of deaf students to pronounce words containing certain phonemes.

The improvement in the child's ability to imitate word pronunciation is also consistent with the theory of imitation and modeling in language acquisition: after the teacher provided a slow, clear pronunciation example, the child was able to gradually imitate the pronunciation of simple words. Qoimudin (2016) likewise showed that the Visual, Auditory, Kinesthetic, and Tactile (VAKT) approach can improve the articulation skills of deaf children by engaging several sensory modalities simultaneously. This is in line with Astalia (2026), who found that the clarity of pronunciation in deaf children can be improved through personalized articulation training using visual aids. The use of drill or repetition techniques also improved the child's verbal communication ability, consistent with Yusup and Muryanti (2022), who showed that frequent, consistent speech therapy greatly benefits children with hearing impairment while also building their confidence when attempting new words.

Nevertheless, the implementation results showed that the child still had difficulty pronouncing words ending in consonants, consistent with the general characteristic of children with hearing impairment, who have difficulty learning to articulate final word sounds because of their limited access to speech sounds (Zaskia et al., 2025). This condition confirms that deaf children need more intensive and sustained speech guidance practice, with active support from teachers, schools, and parents, so that the development of their pronunciation ability can proceed optimally (Mustaqim et al., 2026). Setyaningsih and Rahmawati (2019) emphasized that a sound- and rhythm-perception learning program needs to be implemented gradually, beginning with the identification stage, so that the articulation and communication training of deaf children can proceed in a directed and sustainable manner.

4. Conclusion

The development of communication ability in the child with hearing impairment at SLB Sumber Dharma was positively influenced by the use of flashcards combined with the Individual Learning Program (PPI). The child demonstrated the ability to understand instructions, remained focused during the activities, and participated actively. Pronunciation ability improved, particularly for simple words ending in vowels, while the pronunciation of consonants at the end of words remained inconsistent, and the child still lacked the confidence to speak at a louder volume in daily communication. The child therefore still requires constant, varied speech stimulation to develop his communication ability more optimally.

Based on these findings, teachers are advised to regularly provide speech guidance activities using engaging media such as flashcards, with a gradual focus on the pronunciation of final consonants; the school needs to provide supporting facilities and encourage collaboration

among teachers, therapists, and parents; while parents are expected to continue simple practice at home so that the child's speaking ability develops in a sustained and consistent manner.

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