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APPLICATION OF THE SIBI SIGN LANGUAGE SYSTEM TO SUPPORT COMMUNICATION SKILLS OF FOURTH-GRADE DEAF STUDENTS AT SLB ABD NEGERI KEDUNGKANDANG

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Abstract

Communication is a central component of learning for deaf students because limited access to auditory information can affect the acquisition and use of spoken language. This article describes the implementation of the Indonesian Sign System (SIBI) combined with picture flashcards to support communication skills in a fourth-grade deaf student at SLB ABD Negeri Kedungkandang. The article uses a descriptive approach based on the implementation of a learning plan, with observation, simple question-and-answer activities, and documentation of learning performance as the main sources of information. The learning activities focused on recognizing objects in the surrounding environment, matching pictures with words, imitating SIBI signs, arranging word cards, and communicating simple meanings. The implementation showed positive development in the student's ability to follow instructions, recognize and match vocabulary, express object names through SIBI, arrange simple words into meaningful sequences, and participate actively in classroom interaction. The combination of visual media, SIBI, repetition, direct practice, and positive reinforcement supported the student's academic, communicative, social, and independent learning skills. The findings indicate that communication-oriented and visually accessible instruction can provide meaningful support for deaf students when activities are adapted to their abilities and learning needs.

Keywords: communication skills; deaf students; flashcard; sign language; SIBI

1. Introduction

Communication is one of the basic needs in the learning process because through communication students receive information, understand instructions, communicate their needs, and build social interaction. For students with hearing impairments, limited access to auditory information can affect language and communication development. The implementation report underlying this article positions sign language as an important means of communication for deaf students and emphasizes the need for learning approaches suited to the visual characteristics of learners. In an educational context, learning services need to be designed so that information can be received through the channel that is most functional for students.

The Indonesian Sign Language System (SIBI) is used in formal education and is one of the communication systems introduced to deaf students. The implementation report explains that sign communication involves hand and body movements, facial expressions, and other nonverbal elements. The use of SIBI in learning can help teachers deliver instructions and help students express their understanding. Research on SIBI learning for deaf students also

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shows that instruction needs to be adapted to students' abilities and can be implemented through curricula and lesson plans modified according to their needs (Suparman, 2022).

Communication skills cannot be separated from vocabulary mastery. The more vocabulary students can recognize and use, the more ideas they can communicate. Tiara (2021) explains that SIBI learning for deaf children is related to vocabulary development as a foundation for communication. In the reported implementation, the learning material consisted of names of objects in the surrounding environment, so the vocabulary learned was closely connected to the student's everyday experiences.

The characteristics of learning for deaf students also require the use of visual media. Purniasihi et al. (2024) position visual media as an important support in sign-language learning because deaf students rely on vision to receive much of their information. Research on visual media for deaf students also shows that the use of pictures, videos, and other visual media can help students understand material and support vocabulary mastery (Rahayu et al., 2022; Travelancya et al., 2023). Thus, visual media do not merely function as supplementary materials but can serve as a bridge between concepts, symbols, and students' real experiences.

One visual medium used in the report is picture cards or flashcards. This medium allows teachers to present a single concept concretely through both an image and a word. Research on the development of flashcards for deaf students shows that card-based media can help students understand vocabulary and support more independent learning (Hasanah et al., 2024). Another study on Canva-based flashcards also reported improved vocabulary skills among deaf students after using the medium (Viola et al., 2024). These findings support the use of picture cards as a medium relevant to the learning needs discussed in this article.

The implementation report that serves as the main source for this article shows that the student was able to participate well in learning activities when instructions were delivered through SIBI, visual explanations, and practice. The student could recognize pictures, match them with words, spell and write words, arrange words into simple sentences, and use SIBI to communicate object names. In addition to academic development, the student also demonstrated active participation, enthusiasm, confidence, and the ability to interact with the teacher and peers.

Nevertheless, the implementation of SIBI is not without challenges. The report notes limited mastery of sign variations, the need to repeat instructions, and the need for more effective time management. Other literature also indicates that SIBI may be perceived as difficult by some students and that limited understanding of sign language in the wider community can affect communication outside the classroom (Kaban, 2023; Ramadhani et al., 2024). Therefore, the use of SIBI in learning needs to be accompanied by visual strategies, repetition, direct practice, and adjustment of the level of difficulty.

Based on this description, this article aims to describe the implementation of SIBI in learning to recognize and arrange the names of surrounding objects, describe its contribution to the communication skills of deaf students, and identify the challenges and efforts that arise during the implementation of learning at SLB ABD Negeri Kedungkandang.

2. Method

This article was prepared based on a report on the implementation of SIBI Sign Language learning for a fourth-grade student at SLB ABD Negeri Kedungkandang. The approach used was descriptive and based on learning implementation. The focus of the article was not to statistically test effectiveness, but to describe the learning process and observable changes in abilities during the implementation of the lesson plan.

The participant in the implementation was a student named Atallah Zafir Alyaronizam, who was categorized in the report as a student with a hearing impairment. The lesson plan was designed for Phase B, fourth grade, first semester of the 2026/2027 academic year, in the Indonesian Language subject, with material on recognizing and arranging the names of surrounding objects. The planned time allocation was 1 × 2 lesson periods, with each period lasting 35 minutes. The learning outcomes were directed toward the ability to recognize vocabulary for objects in the surrounding environment and arrange it into meaningful forms through SIBI.

The primary medium consisted of picture flashcards depicting objects close to everyday life, such as books, bags, tables, chairs, and pencils. Learning strategies included demonstration, simple question-and-answer activities, drills or repeated practice, learning through play, assignments to match pictures with words, and direct practice using real objects. The learning implementation also incorporated the principles of awareness, meaningfulness, and enjoyment through attention to the media, use of objects familiar to the student, and positive reinforcement.

Information was collected through observation of the learning process, simple question-and-answer activities, and documentation of learning outcomes. The observed aspects included the ability to recognize object names through flashcards, point to objects according to instructions, imitate SIBI signs, state object names using SIBI, arrange object sequences, answer simple questions, and maintain concentration during learning. The report's rubric used a score range of 1–4, but this article does not present scores because the numerical assessment data were not reported completely. The analysis was descriptive, identifying observable developments in ability and relating them to the learning objectivesContains the type of research, time and place of research, targets / targets, research subjects, procedures, instruments and data analysis techniques and other things related to the way of research that can be written in sub-subchapters, with sub-subheadings.

3. Results and Discussion

3.1 Result

The learning implementation showed that the combination of SIBI and flashcards could help the student follow the planned stages of the activities. Instructions through SIBI, spelling methods, and visual explanations could be understood and followed well. The picture cards served as visual stimuli that helped the student focus attention on the object being studied. This was consistent with the activities designed in the lesson plan, namely recognizing, pointing to, matching, and arranging picture cards of surrounding objects.

In terms of vocabulary skills, the student was able to recognize the contents of the picture cards and match pictures with the appropriate words. After the matching stage, the

student could proceed to spelling and writing the words. The student was also able to arrange several words into simple sentences related to objects or situations in the surrounding environment. These results show that the visual activity did not stop at picture recognition but developed toward understanding the relationship among pictures, words, and meaning.

In terms of communication, the student was able to use SIBI to communicate the names of objects shown on the picture cards. The signs used could be conveyed clearly and appropriately within the context of the activity. The student was also able to understand simple instructions, such as taking a particular card, matching a picture with a word, and arranging cards in the correct order. In everyday communication, the report states that the student predominantly used SIBI to interact with teachers, peers, and parents.

In the cognitive aspect, the student demonstrated an ability to understand sequence concepts and relationships among words. The student was able to arrange the available words into meaningful simple sentences. This ability indicates that the card-arranging activity not only trained vocabulary memorization but also trained simple thinking processes, particularly understanding sequence relationships.

In the social and affective aspects, the student appeared active, enthusiastic, and confident during the activities. The student was able to interact with the teacher and peers, cooperate in simple activities, and demonstrate a friendly and sociable attitude. These conditions supported the creation of an inclusive and enjoyable learning environment.

Overall, the implementation results showed development in four main domains: communication, academic or basic literacy skills, independence, and social interaction. Visual and communicative strategies helped the student understand the material while also expressing that understanding. These findings are descriptive and are not intended as evidence for generalization to all deaf students.

3.2 Discussion

The implementation results show that SIBI functions as a communication bridge in learning activities. When the teacher delivered instructions through clear signs supported by visual media, the student was able to follow activities in a more directed manner. This finding is consistent with Suparman (2022), who showed that SIBI learning for deaf students needs to use planning adapted to students' abilities. In the report underlying this article, such adaptation was evident through the use of simple instructions, repetition, demonstrations, and concrete activities.

The role of SIBI in the implementation was not limited to delivering instructions. SIBI also became an expressive means for the student to communicate object names, answer questions, and respond to communication situations. This reinforces the view that language learning for deaf students needs to provide opportunities both to receive and express information. Ulfah and Ubaidah (2023) emphasize the importance of applying sign language in learning for deaf children, while Tiara (2021) relates SIBI learning to vocabulary development as a foundation for communication.

The use of flashcards was an important component because the material studied was concrete and closely connected to everyday life. Pictures of bags, books, tables, chairs, and pencils helped connect real objects with visual symbols and words. Hasanah et al. (2024) showed that the development of flashcards can help deaf students learn vocabulary and support more independent learning. This finding corresponds with the present implementation, in which the student was able to match pictures with words and continue to spelling, writing, and sentence-arrangement activities.

Visual media are also relevant to the learning characteristics of deaf students. Purniasihi et al. (2024) explain that vision is an important channel supporting language learning and the use of sign language. The implementation at SLB ABD Negeri Kedungkandang showed that when visual media were combined with SIBI, the student was able to follow instructions, maintain attention, and provide responses. This finding is also consistent with research by Rahayu et al. (2022), which showed a positive relationship between the use of visual media and learning outcomes among deaf students.

The combination of visual media and repeated practice was another component supporting learning outcomes. In the lesson plan, the teacher demonstrated signs, asked the student to imitate them, repeated activities with variations in sequence, and provided opportunities for independent practice. This pattern corresponds with findings on vocabulary-teaching strategies for deaf students that emphasize visualization, repetition, and language accessible to students (Latifah et al., 2024). Repetition not only helps students remember the form of signs but also gives them opportunities to process the relationship among objects, words, and movements.

The development of the ability to arrange words into simple sentences shows that flashcard activities can be directed from receptive skills toward expressive and cognitive skills. The student did not merely choose the correct card but also understood sequence and relationships among words. Thus, an activity that is simple in form can involve higher cognitive demands when the teacher provides variations in instructions and sequencing. This is important because communication learning for deaf students should not stop at memorizing symbols.

The social and affective aspects were also important findings. The student demonstrated an active attitude, enthusiasm, confidence, and the ability to interact with the teacher and peers. Positive reinforcement, such as praise and appreciative gestures, was used during learning. This implementation can help create an enjoyable learning atmosphere so that students are more willing to participate. Findings on total communication learning also show that combining sign language, expressions, gestures, and visual media can increase participation and two-way communication in the classroom (Ramadhani et al., 2024; Pendas, 2026).

Although the implementation produced positive results, the report also noted several challenges. Limited mastery of sign variations, the need to repeat instructions, and time management were issues that needed attention. These challenges are important because the success of SIBI learning is determined not only by the availability of a sign system but also by the ability of teachers and the environment to use it consistently. Kaban (2023) found that some students may perceive SIBI as difficult to learn and use. This finding indicates that

teachers need to consider students' level of sign-language mastery and provide instruction gradually.

The use of SIBI also needs to be viewed within the broader context of communication. Ramadhani et al. (2024) showed that limited understanding of SIBI in the community can become a barrier when deaf students interact with people who do not know sign language. Therefore, school-based learning needs to be reinforced by environmental support. Parents can be involved in using SIBI at home, while schools can provide opportunities for teachers to improve their sign-language competence. In this way, communication skills developed in the classroom can be used in everyday life.

From the perspective of media, technological development can also provide support, but it should not replace direct interaction. Prameswari (2021) demonstrated the potential of simulation-based multimedia tutorials to support articulation and SIBI practice, while Subkhi et al. (2024) developed a technology-based approach for SIBI gesture recognition. In the context of this article, however, a simple medium such as flashcards demonstrates that effective learning does not always require complex technology. More important is the suitability of the medium to the learning objectives and student characteristics, as well as opportunities for direct interaction.

Thus, the main contribution of this implementation lies in the integration of three components: SIBI as a means of communication, flashcards as visual media, and experience-based activities as a way of building understanding. These three components allow the student to receive information, process it, and then express it through signs. This approach is consistent with research findings on visual media and flashcards for deaf students, while the implementation described in this article demonstrates their integration in one sequence of activities, from object recognition to word arrangement and communication.

However, the results of this article need to be interpreted carefully because the implementation involved one student and did not use an experimental design or complete pretest-posttest statistical measurement. Therefore, the reported development represents an illustration of learning implementation outcomes, not evidence that SIBI or flashcards alone caused an improvement in ability. Future research could involve more participants, measurable instruments, and designs that allow comparison of abilities before and after learning.

4. Conclusion

The implementation of SIBI Sign Language combined with flashcard media in learning for a fourth-grade student at SLB ABD Negeri Kedungkandang showed positive results in supporting communication skills and the learning process. The student was able to follow instructions through SIBI, recognize and match object vocabulary, use signs to communicate object names, arrange words into simple meaningful forms, and participate in interactions with teachers and peers. The integration of visual media, demonstrations, repetition, direct practice, and positive reinforcement helped adapt learning to the needs of the student with a hearing impairment. These findings emphasize the importance of learning that is communicative, concrete, and visually accessible, although the results remain descriptive and concern only one student.

The implementation suggests that teachers should maintain consistent use of visual media and SIBI while adjusting the complexity of signs to students' abilities. Repetition of instructions, direct practice, and opportunities for independent communication should be maintained. Schools can support teacher competence through sign-language training and the provision of visual learning media, while parents can be involved so that SIBI use continues in everyday communication at home. Future research should involve more students, measurable assessment instruments, and before-and-after comparisons to examine the approach more rigorously.

Teachers are advised to maintain consistent use of visual media and SIBI while continuing to adjust the complexity of signs to the student's abilities. Repetition of instructions, direct practice, and opportunities for independent communication should be maintained. Schools can support teacher competence through sign-language training and the provision of visual learning media. Parents should also be involved so that the use of SIBI can continue in everyday communication at home. Future research can involve more students, use measurable assessment instruments, and compare results before and after implementation so that the effectiveness of the approach can be examined more rigorously.

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