



## Learning of Spoken Language for Deaf Children with Reflective Maternal Method

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### Abstract

*Children with hearing loss experience difficulty in pronouncing vowels and words due to lack of speaking habits, especially in the family environment. This study aims to analyze the use of reflective maternal methods in improving the spoken language of deaf children at the State Special School 7 Jakarta. Qualitative descriptive research methods were used to understand this phenomenon. The data source involves one class teacher and three students with hearing impairment, with interviews, observation and documentation as methods of collecting information. The results show variations in oral language abilities through the reflective maternal method. YAS subjects have less clear articulation but use gestures to complete their communication. MSY is able to produce words and sentences but has difficulty in constructing sentences. AHS, the third subject, also has less clear articulation and uses sign language to support understanding of his interlocutor. This research makes a significant contribution to the understanding of spoken language learning of deaf children so that appropriate strategies are needed to support effective communication for each individual.*

## 1. INTRODUCTION

Children with hearing loss tend to have great difficulty learning all aspects of spoken language [1], [2], [3], [4], [5], [6]. If hearing aids do not provide significant benefits, cochlear implants appear to be a solution that can provide access to spoken language [7], [8], [9]. However, the acquisition of spoken language in deaf children is a process that requires quite a long time [10], [11], [12], [13], [14].

The first three years of a child's life are critical for acquiring information about the world, communicating with family, and developing the cognitive and language foundations from which all subsequent development begins [3], [15], [16], [17]. If a child is able to develop age-appropriate oral language skills, he is more likely to be ready for kindergarten and ready to participate fully in all activities and engage in meaningful social interactions with teachers and peers. It has been shown that children who lack sufficient amounts of language input in their early years are at risk of experiencing poor outcomes in both language and academic endeavors in childhood [18], [19], [20], [21], [22], [23], [24].

According to the United States Preventative Services Task Force (USPSTF) in 2001, research that continuously monitors the speech, language, and educational development of children with permanent hearing loss from childhood is essential [25]. Although hearing aid and cochlear implant technology continues to advance, and there is great effort in providing intervention services and increasing awareness among educators about the impact of hearing loss, delays in language development remain a serious problem for children with hearing loss.

In the past 15 years, research has shown that children with hearing loss only learn language at about 50% to 60% of the rate of children with normal hearing [26]. In fact, most of them had a language delay of at least 1 year when entering school age, and about half had a severe language delay, more than 2 standard

deviations below the mean. As a result, the academic achievement of these children is generally poor, and most of them never reach a functional literacy level [27], [28], [29], [30], [31], [32], [33], [34]. Therefore, to improve education and career opportunities and improve the quality of life of children with hearing loss, it is important to understand more deeply the factors that influence their language development and find the most effective methods for improving language skills.

Many factors can influence spoken language development, such as age at diagnosis, degree of hearing loss, parental role, cognitive abilities, quality of early intervention services, consistency in using hearing aids, and ways of communicating [35], [36], [37]. On tests measuring language such as neurocognition, children with hearing loss score lower than their normal hearing peers [38]. However, to test the results of this large number of factors, a large number of participants is required to be able to draw valid conclusions.

One effort to improve the spoken language of deaf children is by applying the reflective maternal method. This method often involves reflection or introspection about how to communicate and interact with children, to ensure effective communication and understand the child's perspective in more depth [39]. Because Hall et al claim that speaking is necessary for optimal development of deaf children [11]. Findings show that maternal reflective methods influence increased receptive communication in students with hearing loss [40], [41], [42]. In other words, the reflective maternal method involves a warm approach, conversations that illustrate visual ideas, and transitional dialogue, which makes the deaf child's communication easier and ultimately improves the social interaction process.

This research was conducted on three grade 1 students at SLB Negeri 07 Jakarta who had hearing problems. They have difficulty pronouncing vowels and words. This is because they are not used to saying things, especially in the family environment. In fact, their spoken language skills are a strong indicator of future life development. Therefore, this study aims to analyze the use of reflective maternal methods to improve the spoken language of deaf children in learning. It is hoped that this research will not only provide insight into deaf children's learning in spoken language contexts, but also provide concrete steps that can be taken to improve their language and communication development.

## 2. METHOD

The research method used was descriptive with a qualitative approach. This method is used to understand the phenomenon or event being researched [43]. This research emphasizes in-depth data collection, systematic analysis, and detailed descriptions without developing new theories or concepts [44]. Data sources were obtained from one class teacher and three students who had hearing impairments. Interviews, observations and documentation were carried out to collect data. Interviews to reveal data or information regarding language learning through the reflective maternal method. Non-participant observation was used to explore data regarding deaf students' spoken language learning. Meanwhile, documentation is used to obtain detailed information about the subject, place of research, as well as documents related to language learning as well as documents about student abilities. After the data is collected, data analysis is then carried out using steps such as summarizing the results of observations and interviews, presenting the data, analyzing the data, and making interpretive conclusions, namely understanding the meaning of the data that has been collected.

## 3. RESULTS AND DISCUSSION

One of the challenges faced by teachers when teaching deaf children is difficulty in communicating verbally. Teachers try to overcome these difficulties by providing corrections and articulation exercises, as well as other learning opportunities. In improving spoken language, the process takes quite a long time. Therefore, additional efforts are needed to overcome this. During these activities, teachers do not only rely on verbal communication. When teachers have difficulty understanding students' speech, they ask students to repeat the speech while giving signs. If there are still difficulties, the teacher will ask students to write them down. Writing can make it easier for teachers to understand students' speech. This is more effective than trying to understand student speech with unclear articulation. The following are oral language learning activities in class.

Activities in the learning process in the teacher's classroom do not only carry out *perdati* which convey information, but also often carry out *free perdati*. In free practice, the topic of conversation is more often related to items brought by students (such as food containers, glasses, books, pencils, and so on). When conducting a question session, teachers tend to ask more questions that are indirect identification in nature. One of the obstacles that is often faced in the learning process is difficulties in verbal communication

between teachers and students. To improve their spoken language skills, teachers provide corrections and articulation exercises during learning. The following is data on the three students' oral language abilities.



Figure 1. Spoken Language Learning Activities

Table 1 shows the results of the oral language abilities of the three students with the initials YAS, MSY, and AHS. YAS subjects have an unclear level of articulation, often saying words in a low voice, which results in the interlocutor having difficulty understanding what he says. However, YAS has a tendency to complement its communication by using additional gestures when speaking. On the other hand, MSY subjects are able to produce words and sentences quite well, but are often unable to construct complete sentences, and there is an inverse tendency in the structure of their sentences. AHS, the third subject, has speech abilities that are not yet fully developed, characterized by unclear articulation. AHS uses sign language as a tool to make it easier for the interlocutor to understand what he wants to convey.

Table 1. Students' Oral Language Ability

Students	Spoken Language Ability	Information
YAS	His articulation is not clear and his voice is soft when he says something.	If the person you are talking to has difficulty understanding what they are saying, YAS will complement it with signs.
MSY	Speaks in fairly good sentences, but sometimes the sentences are incomplete.	Articulation is unclear and sentence structure is often reversed.
AHS	Speaking ability is not good enough. Articulation less clear.	Use sign language to make it easier for the person you are talking to to understand what you are saying.

Each subject demonstrated strengths and weaknesses in their spoken language. While MSY have superior verbal skills but still face certain obstacles, others use alternative strategies such as sign language to improve their communication. This emphasizes the importance of not only identifying weaknesses in oral language skills, but also finding appropriate alternative solutions or strategies to support effective communication.

The reflective maternal method is used in learning spoken language for deaf children by utilizing observation, reflection and adjustments in teaching. The application of this method has proven to be

effective because it allows children to better understand their surrounding environment and expand their vocabulary in language. Through structured interactions with teachers and peers, children can improve their communication skills and learn how to interact effectively. Active involvement in the learning process and focus on social interaction can speed up children's grasp of the lessons taught by the teacher.

Arora et al stated that the development of spoken language in deaf children is influenced by the amount and diversity of language input [45]. According to Marschark & Spencer, several other factors include age when deafness is identified, access to language and communication, family involvement, and use of assistive devices such as hearing aids or cochlear implants [46]. On the other hand, it turns out that family involvement is very important. When families are actively involved in their child's language development by using communication strategies such as sign language, speech, or a combination of both (a bilingual approach), it can greatly support their language development [47], [48]. Furthermore, education that offers support for deaf children, such as schools for the deaf or inclusive classes with accommodations, also contributes to language development [49]. Such environments often involve speech therapists, teachers skilled in the education of deaf children, and resources such as assistive technology.

The importance of developing spiritual and social attitudes in deaf students is very important. In the reflective maternal method, there is a principle that conversations must contain an element of empathy by using words full of expression in the conversation. The use of expressive words helps students understand and ultimately forms a sense of empathy. Not only that, expressive words also train students' vocabulary, making it easier for them to communicate, especially with other people who usually use similar words [50]. In the formal education process, Socher et al explain that children can express complex thoughts. However, to do so, they need to use complex grammatical structures as well as a diverse vocabulary [51].

Children born deaf show great variation in their language experiences. First, their auditory language input varies. This depends largely on the child's degree of hearing loss and whether they received a device such as a hearing aid or cochlear implant. Second, deaf children's visual language experiences also vary. For all deaf children, access to spoken language is supported by visual input (lip reading). In addition, 5–10% of deaf children know sign language at home from their parents. Others may learn sign language at some point during school or later in their lives, while others may never learn sign language [52].

Research findings by Yu et al outline that communication skills influence social interaction and understanding. Children with low hearing face challenges in picking up on social cues, nuances, and non-verbal communication that are important for developing theory of mind [53]. Research conducted by Kronenberger et al suggests that children with cochlear implants can develop spoken language skills that are comparable to their peers with normal hearing. Implantation at an early age and consistent access to auditory information are important factors influencing language outcomes [38].

The application of the reflective maternal method in learning spoken language for deaf children has proven effective in expanding their vocabulary and increasing understanding of the surrounding environment. Structured interactions with teachers and peers help these children improve their communication skills and learn how to interact effectively. However, factors such as age, access to language and communication, and family involvement are key in a child's language development.

#### 4. CONCLUSION

Interaction with teachers and peers is key in expanding deaf children's communication skills, allowing them to understand lessons better. In addition, family involvement, inclusive education, and technological support also play an important role in their language development. The importance of developing spiritual and social attitudes in the reflective maternal method is reflected in the use of expressive words that support the formation of empathy and enrichment of students' vocabulary. It was apparent that each child demonstrated strengths and weaknesses in their spoken language, with some using alternative strategies such as sign language to improve their communication. Thus, communication proficiency influences social interactions and comprehension, especially for children with hearing impairment who may face challenges in picking up on social cues and nuances, influencing the development of their theory of mind. This research presents a significant contribution to the understanding of deaf children's learning with reflective maternal methods in improving their spoken language. In addition, this research clarifies the role of external factors such as individual age, access to language and communication, and family involvement in the formation of spoken language skills. Equally important, this study highlights that each deaf child exhibits strengths and weaknesses in their spoken language, encouraging the need for appropriate alternative strategies to support effective communication for each individual.

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