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The Effect of Indonesian Language Instruction Using a Reflective Maternal Method Based on Role-Playing on the Speaking Skills of Deaf Students at the SLB Negeri Pembina Tingkat Nasional Bagian C Malang

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Abstract

This study aims to analyze the effect of Indonesian language learning using the Reflective Maternal Method (RMM) based on role play on the speaking ability of deaf students. The study employed a pre-experimental method with a one-group pre-test post-test design involving 6 deaf students in grade 9 at SLB Negeri Pembina Tingkat Nasional Bagian C Malang. The intervention was conducted over 8 sessions. The results showed an increase in the average score from 60 (pre-test) to 68 (post-test). The Wilcoxon Signed-Rank Test obtained a significance value of 0.027 ($p < 0.05$), indicating a significant effect of RMM based on role play on improving the speaking ability of deaf students.

Keywords: Reflective Maternal Method; role play; speaking ability; deaf.

1. Introduction

As social beings, humans constantly need to interact with their surroundings in order to meet their various life needs. Language serves as the primary means of communication that enables social contact, whether through spoken language, writing, or gestures. Language and speech skills are fundamental aspects of a child's development, including for children with hearing impairments or who are deaf. Deaf children face significant challenges in developing verbal communication skills due to limited access to auditory input, which results in delays in vocabulary acquisition, grammatical structure, and narrative skills. These barriers not only affect their social-emotional development but also hinder their academic participation in the learning process at school.

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License. Based on initial observations at the Malang National-Level Special Education School (SLB Negeri Pembina) Section C, it was found that the majority of deaf 9th-grade students still exhibit low verbal speaking skills. They tend to rely on sign language as their primary means of communication, and when asked to speak verbally, their articulation remains unclear, their intonation is monotonous, and their vocabulary is very limited. This situation often leads to misunderstandings in social interactions and hinders the absorption of academic information. The gap between the goals of special education and the reality of students' abilities in the classroom underscores the need for an analysis of appropriate intervention strategies. One approach considered promising is the Reflective Maternal Method

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(RMM), which adapts the natural pattern of mother tongue acquisition. This method emphasizes spontaneous and contextual conversation, involving the teacher in a dual role as a responsive communicator. Integration with role-playing is expected to create meaningful and functional learning situations, so that students do not merely imitate sounds mechanically but understand language use in real social contexts. This study aims to empirically test the effect of this method on the speaking skills of deaf students.

2. Method

This study employed a quantitative approach using a pre-experimental method. The research design applied was a one-group pre-test post-test design, involving a single experimental group without a control group. The study was conducted at the Malang National-Level Special Education School (SLB Negeri Pembina) Section C during the even semester of the 2025/2026 academic year. The research subjects consisted of 6 deaf students in the 9th grade at the Special Education Junior High School (SMPLB), selected using purposive sampling based on the following criteria: (1) having hearing impairments ranging from moderate to severe, (2) not yet having optimally mastered verbal speech skills, (3) being able to use basic sign language, and (4) being willing to participate in the entire research process.

The research instruments consisted of a speaking ability test developed based on a rubric that had been validated by subject matter and instrument experts. The test assessed four aspects of speech ability: articulation, intonation, vocabulary mastery, and fluency. The instrument was deemed valid with a high level of suitability for use. Data collection techniques included: (1) tests (pretest and post-test), (2) observations during the intervention process, and (3) documentation in the form of audiovisual recordings.

The research procedure consisted of three stages. The preparation stage included initial observation, obtaining permission, instrument development, and validation. The implementation stage consisted of a pretest, an intervention comprising 8 sessions, and a posttest. The final stage involved data analysis used descriptive statistics to describe the pre-test and post-test data, as well as the Wilcoxon Signed-Rank Test to test the research hypothesis at a 5% significance levelsub-subheadings.

3. Results and Discussion

3.1 Result

Description of Pre-test and Post-test Data

The pre-test results show that the speaking skills of deaf students are still relatively low, with an average score of 60. The highest score achieved was 70 by two students, while the lowest score was 43 by one student. Most students still rely on nonverbal sign language and facial expressions when communicating. Their spoken speech exhibited unclear articulation, monotonous intonation, and a very limited vocabulary. These findings confirm a gap between

curricular expectations and the students' actual abilities, indicating the need for structured pedagogical intervention.

After receiving the intervention over 8 sessions, the post-test results showed a significant improvement with an average score of 68, an increase of 8 points from the pre-test average. All 6 subjects experienced an increase in their scores, ranging from 3 to 14 points. The highest post-test score was 73, achieved by 3 students, while the lowest was 63, achieved by 1 student. Improvements were observed across all aspects of speaking skills: articulation, intonation, vocabulary mastery, and fluency. Students demonstrated increased self-confidence and motivation to communicate verbally throughout the intervention process.

Hypothesis Testing

The results of the hypothesis test using the Wilcoxon Signed-Rank Test indicate that the implementation of role-play-based MMR has a significant effect on the speaking skills of deaf students. All research subjects showed an increase in scores (positive ranks = 6) with an average rank of 3.50 and a total of 21.00 ranks. Not a single student experienced a decrease or remained at the same level (negative ranks = 0, ties = 0). The calculated Z-value was -2.214 with a significance level (Asymp. Sig., 2-tailed) of 0.027. Since the p-value is less than 0.05, H_0 is rejected and H_1 is accepted. Thus, there is a significant effect of Indonesian language learning using role-play-based MMR on the improvement of deaf students' speaking skillsdiscussed.

3.2 Discussion

The findings of this study indicate that the Role-Play-Based Reflective Maternal Method is effective in improving the speaking skills of deaf students. The success of this intervention can be explained through several mechanisms. First, the RMM method follows the natural pattern of first-language acquisition through loving, spontaneous, and contextual conversations (Van Uden in Bunawan, 2000). This approach is grounded in the child's interests and communication needs, rather than in language programs or rules that require drilling (Papalia et al., 2008). This makes students feel safe and comfortable trying to speak without fear of making mistakes. Second, the integration of role-playing provides a real and meaningful social context for students. Through the simulation of social situations, students not only practice saying words in isolation but also learn to use language in the context of functional communication (Ramadhan et al., 2022). Students become more motivated to speak in everyday interactions, and the learning process becomes more active, enjoyable, and meaningful. This reinforces the findings of Rokmanah et al. (2024) that role-playing is effective in improving students' communication skills.

Third, the implementation of MMR involves a multimodal approach that encompasses all components of communication: speech, lip-reading, reading and writing, sign language, and finger spelling (Bunawan & Yuwati, 2000). The simultaneous use of various modalities provides a rich learning experience and engages multiple sensory channels, which strengthens students' language memory traces. This approach aligns with the findings of Fitriani et al. (2024) that total communication—which combines sign language, spoken language, and visual cues—can enhance comprehension among deaf students. Fourth, the systematic application of the four didactic steps of MMR provides a solid scaffold for the development of students'

speaking skills. The stage of spontaneous, emotionally charged conversation fosters a sense of security and motivation. The visualization stage helps students connect spoken language with written symbols and signs. The reading-creation stage reinforces understanding of sentence structure and vocabulary. The reflective stage enables students to independently recognize and correct linguistic errors (Boskosumitro, 2010; Fauzi et al., 2018).

The improvements observed across all research participants indicate that this method can be effectively adapted to students of varying ability levels. These findings reinforce the results of previous studies demonstrating the effectiveness of MMR in improving the language skills of deaf children (Astutik, 2010; Hernawati, 2007; Zulmetri, 2017; Irwanto et al., 2018). Thus, role-play-based MMR has proven capable of bridging the gap between students' initial abilities and curricular expectations, as well as providing a strong foundation for the future development of deaf students' speaking skills.

4. Conclusion

Based on the results of the data analysis and discussion, it can be concluded that: (1) The speaking skills of deaf students before the intervention were relatively low, with an average score of 60, characterized by unclear articulation, monotonous intonation, and limited vocabulary. (2) After receiving the role-play-based MMR intervention, the students' speaking skills improved, with a post-test average of 68, and all students showed improvement across various aspects of speaking ability. (3) There was a significant effect of the role-play-based MMR intervention on the improvement of deaf students' speaking skills ($p < 0.05$).

The following recommendations are offered: (1) For educational institutions, the results of this study can serve as a basis for developing more structured language learning programs and providing teachers with training in innovative methods. (2) For teachers, it is hoped that they will implement role-play-based MMR as an alternative teaching method while paying attention to multimodal communication and conducting periodic evaluations. (3) For students, it is hoped that they will continue to practice developing their verbal speaking skills in various communication settings. (4) For future researchers, it is recommended to use a stronger experimental design with a larger sample size and to test this method in relation to other aspects of language proficiency as well as at different educational levels.

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