

Learning Strategies Through Babbling Techniques to Improve Language Comprehension Ability in Deaf Children at YPLAB SLB Lembang West Java

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Abstract: Language is a symbol of the referee sound used by members of social groups to work together, communicate, and identify themselves. The main function of language is as a means of communication between humans. With language will facilitate communication between individuals. This is not owned by deaf children. They have difficulty in language skills, especially in abstract understanding. So that deaf children must be given optimal educational services. Based on the language development of deaf children it stops in the groping or babbling phase so that their language experience is very limited. As a result, they have difficulty understanding language and communicating less than optimally. The language in question is the ability of deaf children to understand receptive and expressive language. For this reason, learning strategies are needed to improve language comprehension skills with palpation techniques. The babbling technique is an alternative in this learning because the syllable repetition technique makes deaf children able to think, combine letters into word structures. So that children can understand the word well. This research is based on the barriers of deaf children in understanding language, so a learning strategy is made with the results of field needs analysis. The method used uses research and development (R&D). The results of the field data show that learning strategies using babbling techniques can improve the ability of deaf children to understand language. This can be seen from the increase in the ability of deaf children to recognize syllables, words and being able to understand stories before and after being given learning through the babbling technique. Therefore, through appropriate learning strategies, they can develop their potential comprehensively.

Keywords: Learning Strategies, Babbling Techniques, Language Comprehension Ability, Deaf Children

INTRODUCTION

Language skills are skills that must be mastered by children both as individual beings and social beings. Language is a form of communication in which thoughts and feelings are symbolized in order to convey meaning to others (Annisa & Hasanah, 2022). With the existence of language all individuals will easily understand the meaning of what is expressed. The scope of language forms is spoken language, written language, sign language, body language, facial expressions, pantomime, and art (Hurlock, 2003; Yasin et.al, 2017). Language is one of the media used by humans in communicating. With the existence of language makes it easier for individuals to live their daily lives.

The language skills that must be mastered by everyone in communicating are receptive language and expressive language. Receptive language ability refers to a person's ability to understand and understand what has been conveyed to others, while expressive language ability is the ability aimed at speaking activities (Binger et.al, 2017; Hikamah et. al, 2021). The main basis for language development is through rich communication

experiences. So that it will support other language factors, listening and reading which are receptive skills, while speaking and writing are expressive skills. Skinner (1957) explains that the process of mastering the language (first) is controlled from the outside, namely by stimuli through the environment. Based on this statement, real experience through stimulation can help individuals to further develop receptive and expressive language skills.

Deaf children are children who have hearing impairments so they have difficulty in language. As a result, communication cannot occur effectively. Somad and Hernawati (1996: 27) state that

"A deaf child is someone who experiences a deficiency or loss of the ability to hear either part or all of the hearing aid, so that he cannot use his hearing aid in everyday life which has a complex impact on his life."

Based on the statement above, the impact of the barriers possessed by the deaf child appears. One of them is in the language. Language is related to speech. Good language and speech will lead to vocabulary mastery. Mastery of supporting vocabulary enables a person to communicate properly and correctly.

Deaf children experience speech and language development barriers that are different from children in general. In general, children in mastering language do not really show effort because when they hear they automatically imitate what other people say (Theunissen et.al, 2014; Ediyanto et.al, 2017). The language that is issued by the child who hears it will be repeated and given reinforcement by the parents and becomes a language experience so that the sounds become meaningful. Meanwhile, deaf children because they have hearing impairments will affect the development of language and speech. The development of language and speech in deaf children is the same as in other children in general, it is just that during the bubbling phase the deaf child stops in this phase. The bubbling phase or the Indonesian term *meraban* is the phase in which a person makes a sound that is repeated. The importance of the bubbling phase is that children begin to learn language. Deaf children have difficulty imitating language, resulting in no sound imitation process after the bubbling period, the process of imitating language that occurs is only limited to visual imitation.

Yanti Depe stated that: "with human language can give a name to everything, both visible and invisible, all objects, names, characteristics, occupations, and other things that are abstract. Thus, everything that has ever been observed and experienced can be stored, become responses and experiences, and then processed (think) into understanding".

Based on the statement above, the important role of language is in deviating and processing information in communication, so that understanding must be supported by good understanding and memory.

One of the obstacles that deaf children have is related to understanding words. Obstacles that are often encountered in deaf children are errors in pronunciation, limited vocabulary, difficulty understanding the intent of the interlocutor, etc. This reinforces the occurrence of errors in communicating verbally and nonverbally. Mastery of language for deaf children is minimal, so it is difficult for them to express their thoughts clearly.

Preliminary studies conducted at SLB YPLAB Lembang, obtained the data that deaf children in class II SDLB had difficulties in their ability to understand language. This can be seen when students are given the task of mentioning 3 nouns (which are around the class). The results obtained revealed that the student was wrong in pronouncing the intended word, saying the object did not match the picture, showing the wrong picture, reading the word could be spelled per letter but when connected it was different, it was difficult to express his wishes through language (verbal/ nonverbal). The learning that has been carried out by the teacher so far for these students is still using word reading

techniques and coupled with printed books that are given from schools only. As for reading, students are directly taught the word (by writing the sentence on the blackboard). This makes students confused and just say it without understanding the meaning of what they are saying. In addition, the media used is still limited to using writing on the blackboard or objects around students so that learning is less interesting and unpleasant.

Based on the problems above, an effective learning strategy is needed so that deaf students can improve their language skills well. Learning strategies that are considered suitable for deaf students in understanding language through palpation techniques. By looking at the background of deaf students in their language acquisition, it is hoped that the learning strategy through touching can improve the language skills of deaf students.

METHOD

Research in developing this learning model uses research and development (R & D) research methods. Research and Development is a study to produce products and at the same time test the effectiveness of products through steps or stages of improvement (Mufadhol et al., 2017). In research and development research there are several stages that must be passed, namely (1) Preliminary Studies conducted namely, (2) preliminary trials, (3) Main Product Revision, (4) Product Operational Revision, (5) Field Testing, (6) Final Product Revision, (7) Dissemination and Implementation (Mufadhol et al., 2017).

And in this study the stages were adapted into the following stages:

Figure 1. Research Stages

The subjects research were 3 (three) deaf students in class II SDLB who attended SLB YPLAB Lembang, West Bandung Regency. Content analysis at the preliminary study stage is very important in this research because it will determine the ideal learning strategy to fit the needs of the research subjects. This study used three instruments, namely (1) an instrument to determine the needs of deaf students, (2) an instrument for expert validation and (3) a trial instrument related to language learning strategies for deaf students.

The ability to understand language referred to in this study is the ability of deaf students to understand the meaning of language which can be deciphered through the process of learning language and speaking. This language comprehension ability is measured through the aspect of showing pictures of pronouncing words and understanding words in verbal/nonverbal forms (Razalli et.al, 2018).

FINDING

The results of the analysis of the objective conditions are used as a basis for formulating learning strategies through groping techniques in improving the ability to understand language in deaf children. The results showed that deaf students had difficulty understanding language learning. Things that appear to students when given a word students will only follow the teacher's lip movements, when repeated with the same word

the response is only a silent nod or smile and if assisted by the new teacher can follow the ordered word. The ability to understand the language of deaf students can be seen from the research results in Table 1.

Table 1: language Skills of Deaf Children

Indikator	Language Skill		
	Na	Lo	La
Recognizing Letters	able	able	able
Recognize syllables	Able with help	Able with help	Able with help
Stringing words	Able with help	not able	not able
Understand the word	not able	not able	not able
Extended word phrases	not able	not able	not able

Based on the data above, it can be concluded that the language skills of three deaf students are still lacking. This is indicated by the many indicators that have not been mastered by the three students. From these data it is illustrated that language skills with indicators of knowing the subject letters Na, Lo, and La can already say the letters of the alphabet using sign language. For the ability to recognize the subject syllables Na, Lo and La have been able to say the syllables although they are still assisted. Assembling the words of the subject Name still needed help and subjects Lo and La had not been able to string syllables into words. Indicator understands words and word phrases that the three subjects have not been able to do.

In addition, the results of the research related to the learning patterns carried out by teachers in developing language skills so that deaf students are able to understand language are teachers providing learning using sign language. Language learning begins with mentioning words that will be developed into understanding. For example: the word "book", the teacher will write the word on the blackboard. Together with the students mentioning and indicating the word. The weakness is that deaf students can only participate in the lesson and when asked again students have difficulty understanding the word that was explained by the teacher.

The programs carried out by the teacher in understanding language for deaf students in Table 2.

Table 2: The Learning Program understands the language of Deaf students

No.	Learning Program	Learning Methode	Result		
			Na	Lo	La
1	2	3	4	5	6
1	Ability to understand language and speech	Sign language	Able to use simple sign language.	Able to use sign language	Able to use sign language
		Word card	Learning to use word cards makes it easier for children to learn to recognize syllables, vocabulary.	Learning to use word cards is still syllable recognition. To combine into words the child is still confused.	Confusion in using the media
		Picture card	Learning using picture cards makes it easier for children when learning.	Drawing cards are used as toys, do not understand their function.	Very happy to learn when using pictures
		Tell a story	Still helped tell a simple story	Still helping with storytelling.	Still having trouble telling

The data table above shows that the program carried out by the teacher is still not optimal. So that the language ability of deaf students is still limited. Therefore, it is necessary to have an appropriate learning strategy so that the learning of deaf students goes well.

Based on the analysis data, a learning strategy was developed based on students' needs related to understanding language in the hope that deaf students are able to develop their language with appropriate techniques through comprehensive optimization of residual hearing. So a learning strategy was formulated through the groping technique to improve the language skills of deaf students. The groping technique was chosen because it is an alternative language acquisition for deaf students. The bubbling technique is a way of repeating syllables to produce a meaningful word. The palpation technique is one of the reasons given the pre-linguistic development of deaf students. So in other words this technique is suitable for improving the language skills of deaf students.

The data above can be described into a learning strategy with the following details: 1) Planning which consists of assessment and analysis of the results of the assessment, 2) Implementation which consists of learning objectives, teaching techniques, learning steps, learning media 3) Evaluation which contains assessment and feedback.

The planning stage begins by looking at the analysis of the needs of deaf students by conducting a language assessment. Then after carrying out the assessment the results were analyzed to determine the implementation of learning for deaf students.

The implementation stage at this stage is given to deaf students learning to improve language understanding. Learning objectives are made to see the learning achievements that will be carried out by deaf students (Atika et.al, 2018). The technique used is using the groping technique. The learning steps are made detailed so that deaf students are clearer and understand each lesson. Learning media is also adapted to the needs and learning.

The evaluation stage is the assessment stage to review the extent to which learning is implemented. The assessment was carried out using an oral test by looking at language development and the extent to which deaf students understand language through word cards and the language that has been taught. The follow-up/feedback stage is to see success in learning. Through the above learning strategies it is hoped that it can improve understanding of language through the palpation technique.

Language and speaking are skills that must be mastered by every individual. With language and speech, it makes it easier for individuals to understand language. Language and speech are closely related to communication. So, with the existence of language and speech a person can communicate well and vice versa without language a person will have difficulty expressing his wishes.

DISCUSSION

Deaf children experience loss of hearing function resulting in limitations in language skills. In line with that, Myklebust in Somad and Hernawati (1996:27) states:

"A deaf child is someone who experiences a deficiency or loss of hearing ability either partially or completely as a result of the failure of some or all of their hearing devices, so that they cannot use their hearing aids in everyday life which has a complex impact on their lives".

Based on the statement above, deaf children experience hearing difficulties which will automatically affect their language development. The inability of deaf children to access language sounds through hearing will affect the power of abstraction. Somad and Hernawati (1996:13) state:

"The lack of abstraction power in some tasks is only due to limited language skills, not a retarded mental state. If the language skills are improved, the abstraction ability will also increase".

Seeing from the development of the language of deaf children, the impact of someone who has a hearing impairment is one of them mastering language. Deaf children have difficulty understanding language so they need appropriate learning strategies. Referring to the language acquisition of deaf children, they stop at the groping phase or terms with the bubbling phase where children generally carry out activities of making repeated sounds with the aim of repeating the sound of the language will be stored in long-term memory and at any time the word is spoken then will be easy to use and understand. This does not happen to deaf children. They have no language experience. So, they have difficulty understanding speech and language.

For this reason, deaf children must be given learning that suits their needs so that their abilities develop optimally. One way is to use appropriate learning strategies to help deaf children understand language. Kemp in Deak & Santoso, 2021 learning strategy is a learning activity that must be carried out by teachers and students so that learning objectives can be achieved effectively and efficiently. Meanwhile, according to Strayer, 2012 explaining that learning strategies are the ways chosen to convey learning methods in a particular learning environment, the intended learning strategies include the nature of the scope and sequence of learning activities that can provide participants' learning experiences educate.

The learning strategy developed in the study was based on an analysis of existing needs in the field regarding the ability of deaf children to understand language (Howerton-Fox & Falk 2019). So, that the learning is appropriate and can help deaf children understand language. The learning strategy is to use the bubbling technique or the term bubbling. Why is the groping technique because it refers to the language development of deaf children which stops in this phase, so that deaf children have poor experience of language which results in their limited understanding of the language. The bubbling technique comes from the word bubbling which means repetition of syllables which takes place at the age of 6 to 8 months until the child produces the first word (Big Indonesian Dictionary 2016: 717). Touching can also be interpreted as making a sound as a preparation for speaking. From this statement, the learning strategy using the groping technique is very possible for deaf children to develop in language skills both receptively and expressively.

Therefore, with the right strategy it will be easy to develop language skills so that deaf children increase their understanding of language and in the long run they can communicate effectively.

CONCLUSION

Based on the results of the research that has been done, it can be concluded that through learning strategies using the babbling technique, deaf children are able to develop language skills. This can be seen from the data on the ability to recognize syllables, words and being able to tell stories using sign or spoken language before and after learning is given. Therefore, learning strategies with the babbling technique is one of the right learning in developing language skills so that deaf children improve their understanding of language and in the long term they can communicate effectively and independently.

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Appendix 1: Learning strategic with bubbling technique to improve language ability for Deaf students

No.	learning objectives	measured Ability	Learning Techniques	Learning materials	Learning step	Learning Media	Evaluation		Ket	
							able	Not able		
1	2	3	4	5	6	7	8	9	10	
preparation phase										
1	Language Development Assessment	Conducting assessments related to the language abilities of deaf children.				Language development assessment				
2	Analysis of assessment results	Analysis of the results of the assessment to design a learning strategy for deaf children's language skills				The results of the assessment are used as a reference in designing learning strategies for deaf students in improving their language skills.				
Implementation Stage										
3	Understanding Language	Receptive speech and language skills	Bubbling technique	Recognition of vowels by sound	<ul style="list-style-type: none"> - Introduction - Do warm-up activities with mouth exercises - Saying vowel letters (A,I,U,E,O) alternately - Correcting the sound coming out of the student's speech organs - Do the activity of repeating 2 syllables Example 	<ul style="list-style-type: none"> • Whistle • Paper • Word cards • Visual Media (ppt Alphabet Letters) 				

					<p>s: aa, ii, uu, ee, oo (repeated 3 times)</p>			
		Receptive speech and language skills		Recognition of consonants by sound	<ul style="list-style-type: none"> - Saying consonants alternately - Correcting the sound that comes out of the child - Display word cards and picture cards - Read the syllables correctly . Example : baba, aunt, papa, etc - Assemble the word from the syllables - Displays images that match what is read / hinted at 	<ul style="list-style-type: none"> • Word cards • Picture cards • Visual media (ppt letters and syllables) • Visual media (ppt pictures of objects) 		
4	Improving the language skills of deaf children	Receptive speech and language abilities of deaf children	Bubbling technique	Sign language	<ul style="list-style-type: none"> - Introducing sign language (letters/alphabets, numbers, words, sentences) - Carry out sign language learning activities with the 	Sign language book		

					<p>guidance of the teacher</p> <ul style="list-style-type: none"> - Demonstrate sign language correctly 				
				Syllable recognition	<ul style="list-style-type: none"> - Mention vowel consonants (KV) with the KV-KV pattern Example : ball, leg, horse, etc. - Mention vowel consonants (KV) with the CVK-KVK pattern Examples: kah, lah, and, yah 	<ul style="list-style-type: none"> • Syllable cards • Picture cards in animated form • Visual media (ppt pictures of words and objects) 			
				Word recognition	<p>Noun</p> <ul style="list-style-type: none"> - Mention 5 names of objects in the class - Mention 3 nouns around the class (my book, hat, desk) - Mention 3 words body parts (eyes, nails, cheeks) <p>Verb</p> <ul style="list-style-type: none"> - Mention 3 verbs (eat, drink, 	<ul style="list-style-type: none"> • word cards, • Picture cards • Visual media (word picture ppt) • Visual media (ppt pictures of objects) 			

					sit) Adjective - Mention 3 adjective s (smart, stupid, diligent)			
				Sentence recognition	- Mentio n 2 short sentenc es S P (subject Predica te) (I eat, you drink) - Mentio n 2 SPO sentenc es (subject Predica te Object) (I want to eat, you want to play) - Mentio n 2 SPOK sentenc es (I want to go to school, I want to go to the mall).	<ul style="list-style-type: none"> • Word cards • Pictur e cards • Visual media (simpl e story picture ppt) 		
				Tell a story	- Do simple story reading activitie s - Underst and reading by answeri ng story questio ns	Story book with picture		
5	understand	Speech and	Story	Recognize	- Mentio	Expressi		

	ing of language	expressive language skills of deaf children	telling	expressions	<p>n the happy expression symbol</p> <ul style="list-style-type: none"> - Mention the symbol of a sad expression - Mention the symbol of angry expression 	on symbol cards (angry, happy, sad)			
				Action response	<ul style="list-style-type: none"> - Answer when asked - Tell stories when something is interesting (Example: while on vacation / shown a picture then asked to describe) - Express wishes through verbal / nonverbal language 	<ul style="list-style-type: none"> • Storybook • Picture cards 			
Evaluation stage									
	<p>If students can carry out all learning activities independently, then the learning strategy is successful</p> <p>If students can do learning with a little help, then the learning strategy is said to be successful</p> <p>If students only do 2-3 lessons with assistance, then the learning strategy needs to be improved</p> <p>If students are not able to carry out learning according to each step given, then the learning strategy is said to fail and needs to be replaced.</p>								