

Prompting Technique to Increase Speech Building Ability of Students with Hearing Impairment

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Abstract: Students with hearing impairment has hearing impairment which due to clumsy on speak organs so their communication is impaired. The purpose of research is for increasing base communication skill, speech building. This research is quasi-experiment with *time series design*. The result showed pretest value to posttest value was increased. The increase value was 31,92 From 42,92 became 74,88. Intervention was prompting with reinforcement for motivating studentents. The conclusion is prompting technique influential significantly for increasing speech building ability of students with hearing impairment . The suggestion for teacher is this technique become as alternative technique for increasing children communication skill.

Keywords: prompting; speech building; hearing impairment

INTRODUCTION

Communication is one of the important things for humans. Communication is needed in establishing relationships with other human beings. Therefore, communication is needed in various activities (Hardjana, 2003). Starting from activities in the school house to the community. Activities at home also require communication so that the situation in the house becomes harmonious. Activities at school also require communication in the form of interaction between friends, learning and counseling. The broader scope is society. This scope is very broad. Various activities occur ranging from social interactions, work, economic to political interactions. All these parts always contain communication in them.

Unlike the case with the students with hearing impairment, Communication is a weakness for students with hearing impairment, especially oral communication, but not a few students with hearing impairment are able to master it (Pradana, 2015). Many educational institutions ranging from the lowest to the highest levels apply oral communication to the students with hearing impairment. This is done so that students with hearing impairment can develop and not only stagnate with body language or just gestures. Initially it might be difficult for a students with hearing impairment to communicate verbally but that is not impossible.

Research by Rifnurrohma et al (2017), Setyawan (2016) and Razalli et al (2018) prove that oral communication and mastery of the language of students with hearing impairment are important. They seek all methods and media so that the language skills of children with hearing impairments increase. The results of the study also revealed that the method was successful in improving the language skills of Students

with hearing impairment. In the research rifnurrohma et al (2017) using Microsoft word application media. In the research of Setyawan (2016) using media pictorial crosswords. And in Razalli's study (2018) using pictorial text.

The most crucial stage is speech building. Speech building or word formation is the initial process so that Students with hearing impairment can communicate verbally (Sadjaah, 2013). The basis of verbal communication skills is the speech building. This basic ability needs to be given and trained at a low age. The lower the age, the greater the ability to master speech building skills. That is because the speech tool of Students with hearing impairment has not experienced too much stiffness so that the reluctance to speak is not too big.

Special interventions are needed so that students with hearing impairment speech building abilities can increase. The intervention needed is an intervention in the form of habituation. Interventions with such models are called behavioral modifications in the form of behavioral counseling. Behavioral counseling has a variety of types. Some types of behavioral counseling include modeling, economic tokens, shaping, assertiveness, shading, prompting to aversion (Runtutahu, 2013).

Saraswati Research journal (2013) explains, to improve communication skills can be done with behavioral counseling techniques of positive reinforcement. Positive reinforcement in question is giving gifts or praise to individuals after the individual has performed good behavior so that the behavior can be maintained. This study proved to be successful in improving communication between students as many as 24 people in two cycles.

Table 1. Criteria for Feasibility of Material

Presentase	level of feasibility
81% - 100%	Very Valid
61% - 80%	Valid enough
41% - 60%	Less Valid
21% - 40%	Invalid
00% - 20%	Very invalid

Source (Akbar, 2016)

Table 2. Results of Expert Validation

No.	Validator	Persentase	Criteria
1.	Material	85%	Very Valid
2.	Praktitioner	78,75%	Valid enough

Table 3 Pre-Test Values of Speech Building Ability for Students With Hearing Impairment

No.	Name	Pre-Test Value				Total	Average
		1	2	3	4		
1.	AB	55	35	45	50	185	46,25
2.	DN	40	35	40	40	155	38,75
3.	RI	30	35	45	45	155	38,75
4.	RT	25	30	30	30	115	28,75
5.	RV	50	55	55	55	215	53,75
6.	VO	45	50	45	55	205	51,25
Overall Average		40	40	43	45	171	42,92

This proves that behavioral counseling techniques can motivate students to open their mouths in the sense of communicating. Communication that occurs in it is a word formation process when students speak.

The results of Arnez (2016) study that modification techniques of prompting and fading behavior can improve vocabulary of Students with hearing impairment. The vocabulary is in the form of functional words. This increase is not only in memorized vocabulary, but an understanding of the original activities as well. The results of the study stated that children experienced an increase in vocabulary, pronunciation, and understanding functional words. These functional words are within the scope of simple daily activities such as cutting or drawing.

Based on some of the results of the above research, the author needs to solve the problem so that students with hearing impairment speech building skills can increase at an early age. For this reason, researchers need to conduct research on speech building capabilities by being given the treatment in the form of prompting techniques. This study aims to analyze the influence of prompting techniques in improving speech building skills of Students with hearing impairment in Seduri State SLB, Mojokerto Regency.

METHOD

This research method uses quasi-experimental design with interrupted time series design. The dependent variable in this study is speech building ability and the independent variable is prompting technique. The subjects in this study were a group of six third grade students with hearing impairment students in the Seduri State SLB, Mojokerto Regency.

Research data was collected by researchers through observation and tests. Subjects were given an oral test that assessed using an observation sheet. Then the collected data was analyzed using statistical analysis. Next, the researcher tested the hypothesis using the Wilcoxon sign-rank test. The use of the Wilcoxon test is because the data in this study are two groups of data originating from the same subject as a result of before and after treatment. The number of subjects was only six students, the amount was too small to be able to ensure the data was truly normally distributed or not.

The stage of the research is (1) performing a pretest in the form of an oral question regarding the nouns and daily verbs, the pretest is carried out until the data is stable, (2) the treatment in the form of learning about speech building in which prompting techniques, (3) posttest with questions that are different from the pretest but the criteria are the same namely nouns.

Before conducting the pretest a validation test was performed on the instrument. This validation test is carried out on oral test and RPP instruments conducted by material experts and practitioners, table 1, table 2.

The instrument validation in the form of an oral test was validated by material experts with small revisions. Likewise with RPP validated by expert practitioners who received minor revisions. After validating and revising the instrument, the researcher then carried out the research.

FINDINGS AND DISCUSSION

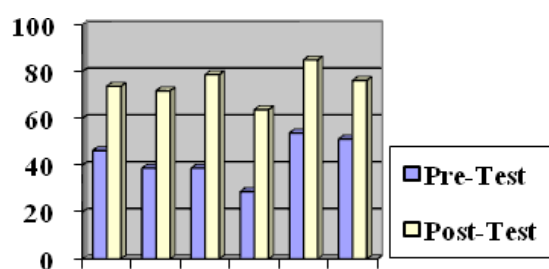
Findings

After performing instrument validation, the next process of research or data collection. The data in this study were obtained from the results of four pre-tests and four post-tests. Interventions were given as many as four sessions. The stages of the research were carried out on subjects totaling six students.

The pre-test was held on the 15th, 19th, 20th, and 22nd of 2018, on Thursday, Monday, Tuesday, and Thursday again for class III students at the Seduri State SLB in Mojokerto Regency. The pre-test in the form of an assessment sheet (observation) from an oral test on speech building skills contains 5 aspects of assessment with 4 assessment criteria. This is done to facilitate the assessment of oral tests on students' speech building abilities.

Table 4 Value of Post-test Speech Building Ability for Students With Hearing Impairment

No.	Name	Post-Test Value				Total	Average
		1	2	3	4		
1.	AB	70	70	70	85	295	73,75
2.	DN	65	70	70	80	285	71,75
3.	RI	70	75	80	90	315	78,75
4.	RT	60	60	65	70	255	63,75
5.	RV	80	80	90	90	340	85
6.	VO	65	75	80	85	305	76,25
Overall Average		68,33	71,67	75,83	83,33	299,17	74,88

Figure 1. Value Results Diagram Pre-test and Post-test

Based on the data in table 3, it can be seen that the results of the pre-test of speech building abilities of students with hearing impairment class III students at Seduri State SLB had an average of 42.92 including less. The low scores obtained by students are influenced by several aspects. The first dominant aspect of some assessment points is to recite the letters coherently.

Students tend to be taught and introduced about alphabetic sounds, so students understand there are letters A to Z and their sounds but don't know the order. The low value of the pretest is also influenced by the impact of student impairment. According to Efendi (2008) the impact of carnage can cause students difficulty in producing language sounds or sounds. The impact is the reason for the low value of students in the second and third aspects of the assessment of pronunciation of vowel and consonant sounds.

After pre-test students are given treatment four times, namely on the 27th, March 29th and 2nd, April 4th 2018. After being given treatment with Prompting Technique, students are given a post-test on the same day but at different times, namely the afternoon session after rest. Oral tests given in the post-test in the first 3 aspects are the same as the pre-test due to absolute basic abilities. The last two aspects of the post-test researchers differed from the pre-test so that students did not seem to memorize but still used nouns.

Based on the data in table 4, it can be seen that the results of post-test speech building skills after being given treatment (treatment) at the time of learning have an average value of 74.88. The assessment of this posttest has increased compared to the value of the pretest.

Based on the rules of decision making with a real level of $\alpha = 5\%$, if the price is calculated $> T_{table}$ then H_0 is accepted and if the price is calculated $\leq T_{table}$ then H_0 is rejected Figure 1. So, H_0 is rejected if the Thitung value is smaller or equal to the T_{table} value (Sudjana, 2005). The calculation results from the existing data with $N = 6$ then $T_{table} = 0$, so that $Thitung \leq T_{table}$ is $0 \leq 0$. H_0 is rejected because $Thitung$ is the same value as T_{table} so H_a is accepted which states that prompting techniques significantly influence the improvement of speech building abilities of students with hearing impairment.

Discussion

Students with hearing impairment problems occur in the inability to accept and interpret stimuli in the form of sound so that it has an impact on the stiffness of the speech device (Efendi, 2008). The conditions in the field are proof that students have difficulty in forming languages or called speech building. Some consonants are incorrect in pronunciation and even vowels are still there, the sound of which is not correct. Students are also still guided intensively in saying everyday words such as words / good morning / or / clothes/.

The formation of the language of students with hearing impairment has several basic steps that must be achieved. The basic stages consist of six stages, including (1) having the correct basis of speech, (2) forming the sound of language (vocals and consonants), (3) understanding sounds / sounds having meaning, (4) correcting the wrong speech, (5) differentiating one speech from the other, (6) functioning of a speech tool that is rigid, because Students with hearing impairment can still speak even if they cannot hear it, for this reason it is necessary to optimize the speech tool (Sadjaah, 2013).

The aspects assessed in this study did not use the whole basic stages but only the initial three basic stages. The three initial stages are further broken down into (1) uttering in alphabetical order, (2) pronouncing vowel sounds, (3) saying consonant sounds, (4) saying nouns, and (5) indicating the meaning of the word. These five aspects are the basic stages that children must achieve in improving speech building skills.

The condition of learning in the classroom shows the formation of student language is still low. This is seen when the teacher points to objects only 1 in 6 students can answer. When the six students were told to say the designated word, the pronunciation of all the students still got improvement from the teacher. There are students who have not been able to distinguish sounds / c / and / j /. There are also students who sound the language from the letters / b /, / c /, / d /, and / t / same which is read / p /. In vowel sounds, there are students who cannot distinguish sounds / o / with / u / so they are read the same / u /. These interchangeable speech sounds are one of the errors in students with hearing impairment speech disorders called dyslalia (Sadjaah and Sukarya, 1995).

The condition of students in schools is in harmony with existing theories. In the first aspect students have difficulty reciting the alphabet coherently. Children understand there are letters A-Z but, do not understand the concept of the sequence. This can occur because the child's intelligence is hampered by the development of the language so that to understand the concept of the order in the alphabet takes longer. This statement is in line with Wasita's statement (2012) that the impact of impairment is the hampering achievement of academic potential. According to Melinda and Heryati (2013) language is an abstract that requires practice, so students who only get sound pronunciation training will have difficulty understanding the concept of alphabetical order. Haenudin (2013) also states that the development of Students with hearing impairment's intelligence is not as fast as children who hear. This statement strengthens the condition of Students with hearing impairment who need a long time to understand the concept of alphabetical order.

In the aspect of pronouncing vowels it is easy to do. Even so, there are still students who are wrong in pronouncing vowels. These errors occur in letters / o / and / u / or / e / and / i /. vowel pronunciation errors occur because the visual form of the pronunciation of the two pairs of letters is almost the same which causes less perfect visual imitation. It also occurs in consonants like / b /, / d /, / p / which are both pronounced / p / or / c / and / j / read / c / all. This is in accordance with the statement of Somantri (2012) that students with hearing impairment learn language by doing visual imitation rather than imitation of sound so that what the students imitate their visual form, however, the sound that comes out is sometimes different from correct pronunciation. Efendi (2008) also mentions that the impact of carnage is that students have difficulty receiving sound stimuli so that when they are taught the sound of language, the production of the sounds of the students' language is incorrect pronunciation or even no sound is heard at all. Vocal sound errors in students can also be caused by students feeling confused according to the statement of Glazzard, et

al. (2015) Students with hearing impairment are often confused in words that sound similar.

In the aspect of pronouncing nouns, students also still get low scores. Factors that influence are sound production that is not maximal as a result of phlegm, causing difficulty in articulating appropriate speech (Efendi, 2008). Besides that, the students with hearing impairment poor vocabulary so that the new vocabulary will be difficult in the formation of pronunciation. Errors in word pronunciation can also be due to students with hearing impairment ness also often occurs refinement or reduction of syllables in words such as / shoes / become / one / (Melinda and Heryati, 2013).

In the aspect of showing meaning, students still have low scores in the pretest. In normal language development, children have collected the vocabulary and its meaning at the age of one year with the noun level (Melinda and Heryati, 2013). However, because Students with hearing impairment have obstacles the language development is slow. Only at certain ages do children learn little by little about the vocabulary of nouns. On the vocabulary of new nouns, students will have difficulties in their meaning because they have to rearrange concepts in their minds. This is in line with the statement of Schulz (1991) that students will interpret words in sentences to formulate concepts in their minds.

After being given prompting the student's posttest value increases. Prompting itself according to Runtutahu (2013) is giving a stimulus in the form of ways for individuals to produce the right response. Prompting is a behavior modification technique that goes through stages. Prompt types have various kinds including verbal (prompt), models or examples (modeling prompt), physical (physical prompt), and gestures (gestural prompt) (Runtutahu, 2013).

Students are not only given a prompt but also given a reward so that students are more enthusiastic and motivated. The advocates in this study were games that would make students interested and more motivated in learning. In addition to the inauguration in the form of an inaugural game, it is also given in the form of an added game turn. If it appears monotonous or gets too many additional turns in one try, the inaugurator will end in the form of praise or applause. This is done so that other students are not saturated in waiting for their turn.

Prompting is a detailed and intense behavior modification technique so students can learn speech building in depth. Students can achieve good results in the three basic stages of speech building. Children's language ability increases after being given a treatment in the form of prompting technique. Student pronunciation becomes better, knowledge of vocabulary is increased by understanding the meaning of words, especially nouns. This is in line with Arnez's (2016)

research, namely the modification of prompting and fading behavior can improve vocabulary of Students with hearing impairment. The vocabulary is in the form of functional words. This increase is not only in memorized vocabulary, but an understanding of the original activities as well. The results of the study stated that children experienced an increase in vocabulary, pronunciation, and understanding functional words. These functional words are within the scope of simple daily activities such as cutting or drawing.

Other studies that used the prompt though with slightly different titles, namely Punusingon, et al (2013), entitled the application of behavior modification procedures with fading techniques and economic tokens to increase the vocabulary of autistic children at SLB Dorkas Kakas. Although the subjects were not students with hearing impairment, but in this study proved that behavior modification can increase vocabulary in which there is a speech building process. The title of this fading study implies that in this study used prompts to increase children's vocabulary.

Parmawati, et al. (2015) have also conducted the same research as Punusingon, et al. Their difference in penetration lies in the subject. Parnawati conducts research on fading techniques and economic tokens in students with hearing impairment, while Punusingon does this in autistic students. In this study, prompt selection is very helpful for students in learning words, both pronunciation and meaning. Students have mastered 90% more than the number of words that have been taught. The conclusion of this study is that behavior modification, especially fading techniques that are supported by economic tokens can improve mastery of students' vocabulary.

Based on the description of the results of the above research, it can be seen that behavior modification can be applied and proven to improve the language skills of children with special needs, especially students with hearing impairment. From some of these studies, prompt took a big role in increasing vocabulary mastery. Mastery includes pronunciation and also the meaning of words. Students experience an increase due to intensive treatment. In addition, the factor that has made this treatment an influence on students with hearing impairment speech building skills is on the provision of confirmation.

According to this study, the influence of prompting techniques in improving speech building skills of class III students with hearing impairment at the Seduri State SLB in Mojokerto Regency can be seen from the results of the comparison of the average results of the pretest and posttest. The average posttest results increased by 74.88 from the pre-test results of only 42.92. This increase proves that prompting techniques have an effect on the improvement of speech building abilities of class III students with hearing impairment in Seduri State SLB, Mojokerto Regency.

CONCLUSION

The results of the intervention in this study that prompting technique is an effective technique in improving speech building abilities of third grade students with hearing impairment in SDLB. The effectiveness of the prompting technique is also supported by the provision of reinforcers that are appropriate for students.

This prompting technique should be used as an alternative to improve students with hearing impairment communication skills at school or at home. Further researchers and developers are expected to be more innovative in combining prompting techniques that will be used with other techniques to improve communication of students with hearing impairment.

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