THE EFFECTIVENESS OF SCHEMATA TECHNIQUE IN SPEAKING SKILLS TO GRADE VIII STUDENTS' AT MTS. NURUL HIKMAH TINJOWAN IN SCHOOL YEAR 2019/2020

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The objective of the study is examine whether the schemata technique affects the students' speaking achievement at MTs. Nurul Hikmah Tinjowan in school year 2019/2020. The method used in this study was an experiment method. The population of this research was grade VIII student of MTs. Nurul Hikmah Tinjowan, There are 3 parallel classes, with 107 students. To get the sample from population the researcher takes the 25% which has 40 students. Having analyzed the data thoroughly, the conclusion is schemata technique can give significantly the effect on the students' mastery of speaking. It also makes the students more social and active, more independent in the classroom and also makes the students more interested in the subject.

Key Words: Speaking, Schemata Technique

1. INTRODUCTION

English is essential to be taught for the younger people, for this case; students from the beginner up to the senior high school. In developing the students' ability in mastering English, it cannot be separated from speaking skills. Because it can be a measurement of students to understand English. Speaking is very important because speaking and human being cannot be separated from each other. Speaking is used to express their ideas and to communicate to people in civilized world. That is why speaking is important. Based on the preliminary research on MTs. Nurul Hikmah Tinjowan, the researcher has found that the students' achievement in language skills especially in speaking is still insufficient. The researcher has observed that there are some problems that is needed to be overcome. In teaching learning processes, the teacher provides less portion of time of speaking activities compared to the other skills. In addition, the strategies used in teaching learning processes are not varied and not interesting. The other factor is that teachers do not try to find out appropriate techniques in their teaching especially in teaching speaking. As a consequence of the problems mentioned above, the students' achievement in speaking is still low.

Referring to the problems above, it is essential to implement a method or strategy that can solve the problem, that is, a method that can bring students out of boredom, competitive and individual class atmosphere, and is more student-centered that can improve students' achievement in speaking. Teaching speaking can be done through some ways or some techniques. One of them is by implementing of schemata technique in teaching speaking. In this case, students allow finding similar words, which has relationship to the main word. They can work in-group or individually. They learn to share knowledge and information about targeted content, and willingly to do this because it is naturally following the part of the class activity. Schemata technique is an extraordinary registry and planning which harmony work with brain to recollect easily fresh idea they can evoke pattern that will show how to order the fact and ideas in interesting ways. This is particularly useful at the start of thinking, or of planning, or at the start of writing, or at any point where you get stuck or find your ideas too predictable.

Students not only use their left side of the brain to identify words in the usage of schemata technique, but in the same time they also use the right side of the brain in learning language. They will have opportunity to make some colorful pictures, lines, symbols or signs to help them remember the words or the facts in their mind maps. Moreover, students will get their own way in comprehending certain topic or material by using schemata technique. It is because schemata technique it self as personal as our body. So, every student will not feel depression in understanding the material; they will learn differently each other but at the end of the lesson they will get the same comprehension. By using schemata technique students can remember well, make a better notes of their textbook, rise the idea, save the time to understand the material and concentrate with the material. In addition, at the end of the lesson, they will have ability to comprehend well the material in the textbook and also they can tell other people easily about their understanding of certain topic by using their own schemata technique.

1.2. The Significances of the Study

The result of this study is intended to give contribution both theoretically and practically.

1. Theoretically

   a. The results of this study expected as reference to the other researcher who wants to study more about schemata technique.

2. Practically

   a. The result of this study used as an instrument of measuring the teacher's technique, and can develop the students' knowledge on language teaching and learning through the real investigation.
   b. The results of this study can be applied in teaching English especially in teaching speaking in order to increase the students' achievement and motivate them in learning English betterand it is also expected to be able to be used in the classroom as one of the strategy in teaching speaking skill.
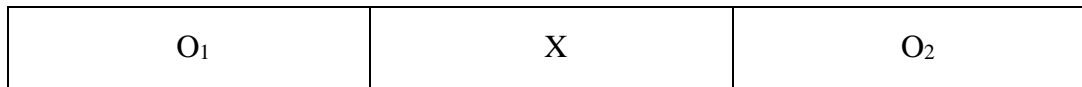
2. THE RESEARCH METHOD

3.1. Research Design

The method will be used in this study was an experiment method. In this case; the present researcher will be analyzed the effect of schemata technique on speaking. After that, present researcher gives a treatment by using schemata technique. To be clear, it can be seen on the figure 1 bellow.

O_1	X	O_2

3. *Figure 1*. Research Design

In the research design above, observation will be done twice; they are before and after treatment. Observation will be done before treatment called pre-test (O_1) and observation is done after treatment called post-test (O_2).

In this study, present researcher uses test and administrates the way to collect data such as pre-test, treatment, and post-test.

Where, the present researcher uses the same test but it uses schemata technique become treatment. After that, the present researcher gives post-test to the students. It can help the researcher to overcome the problems to find out the effect of schemata technique on speaking.

3.Population and Sample

3.1a. Population

The population of this research was grade VIII student of MTs. Nurul Hikmah Tinjowan, There are 3 parallel classes, with 107 students.

Table 1. Population

No	Class	Total
1	VIII-1	35

2	VIII-2	36
3	VIII-3	36
Overall		107

4.

3.2 Sample

According to Arikunto (2006: 102) for the number of the data, she says: Untuk sekedar ancer-ancer maka apabila subyeknya kurang dari seratus, lebih baik diambil semua sehingga penelitiannya merupakan penelitian populasi. Selanjutnya jika jumlah subyeknya besar dapat diambil 10 - 15% atau 20 - 25 % atau lebih.

To get the sample from population the researcher takes the 25% which has 40 students.

Table 2 Sample

No	Class	Total
1	VIII-1	13
2	VIII-2	13
3	VIII-3	14
Overall		40

The Instrument for Collecting the Data

3.3. Pre-test

In this research the writer uses a test method as the instrument. Test is a set of questions or other practices or devices used to measure the skill, intelligence, ability and talent of an individual or a group. The type of test used here is achievement test.
Treatment

This step is to find out the students speaking. There are two classes. The first class, call experiment class will be taught by using schemata technique. The second class, called control class has taught by using conventional method.

Post-test

The post-test has administrated to measure the students' competence after the treatment.

3.DATA AND DATA ANALYSIS

Table. 3 Pre-Test of Control Group

No.	Range of Score	Frequency
1	20-24	4
2	25-28	7
3	29-32	7
4	33-36	15
5	37-40	3
6	41-44	1
7	45-48	0
8	49-52	0
9	53-56	1
10	57-60	1
11	61-64	1
Total		**40**

From the table above, it can be seen that the students who got lowest score in the range of 20-24 were 4 students, while the highest frequency was the range of score 33-36, there were 15 students, and only 1 student got in the 61-64 range of score.

Table 4 Pre-Test of Experimental Group

No.	Range of Score	Frequency
1	24-28	6
2	29-32	5
3	33-36	9
4	37-44	10
5	41-44	5
6	44-48	5

	Total	40

From the table above, it can be seen that the students who got lowest score in the range of 24-28 were 6 students, while the highest frequency was the range of score 37-44, there were 10 students, and in range of score 41-44 and 44-48 there were 5 students each of the range.

Table 5 Post-Test of Control Group

No.	Range of Score	Frequency
1	56-60	11
2	61-64	4
3	65-68	6
4	69-72	7
5	73-76	8
6	77-80	4
	Total	**40**

From the table 4 and 5 there was an improvement of students' learning achievement after being conventionally. It is clearly that in the range 77-80, in pre-test no students got the score in that range, but after applying the conventional way there 4 students who got in that range.

Table.6 Pos-Test of Experimental Group

No.	Range of Score	Frequency
1	45-48	1
2	49-52	0
3	53-56	0
4	57-60	0
5	61-64	1
6	65-68	5

7	69-72	6
8	73-76	6
9	77-80	9
10	81-84	6
11	85-88	3
12	89-92	0
13	93-96	1
14	97-100	2
Total		**40**

From the table. it can be seen that there was an improvement in students' learning achievement after being taught by Silent way. It can be seen that from the frequency of the score. In pre-test there were 6 students who got the score in the range of 24-28, while in post-test no one got the score in that range anymore, and it can be also seen from the highest frequency, in pre-test the highest frequency was in the range of 37-40, while in the post-test there were 9 students in the range of 77-80.

3.1 Data Analysis

From table, it can be seen that:
1. The highest and the lowest scores of the control group pre-test were in the range of 20-24 and 61-64, while the highest and the lowest of the control group post test in the range of 56-60, so it was higher than in pre-test.
2. The highest and the lowest scores of the experimental group pre-test was in the range of 24-28 with the frequency was 6 and 45-48 with the frequency was 5, while the highest and lowest scores of the experimental group in post test was in the range of 45-48 with the frequency was 1 and 97-100 with the frequency was 2.
3. The total score of pre-test of control group is 1.384 and in experimental group is 1.508. So the total score of pre-test of experimental group is higher than the control group.
4. The total score of post-test of control group is 2.752 and in experimental group is 3.164. So the total score of post-test of experimental group is higher than the control group.

3.2 The Validity of the Test

To know the test is valid or not, this study applied the formula recommended by Arikunto (2003) as the following:

$$P = \frac{B}{J}$$

Where: P: Index of difficulty

B: Right answer

J: Number of sample

The value standard is as the following:

0.0 – 0.30   = difficult

0.31- 0.70 = fair

0.71 – 1.00   = easy

From the item analysis (Appendix B), it was found that from 25 item tests there were 163 right answers and then from the calculation at the test validity of the test was 0.65. So it can be concluded that the test validity was fair.

3.3 The Reliability of the Test

To find the reliability of test, the formula is as follows:

$$r = \frac{K}{K-1}\left[1 - \frac{M(K-M)}{KS^2}\right]$$

Where: r: the reliability of the test

K: The number of items in the test

M: The means (arithmetic average) of the test score

S: Standard deviation

Which data from the research:

K = 25

$M = \frac{\sum x}{N} = \frac{326}{20} = 163$

$S = \frac{\sum x^2 \frac{(\sum x)^2}{N}}{N} =$

$\frac{5452 \frac{(326)^2}{20}}{20} = \frac{5452 \frac{(106276)}{20}}{20} = \frac{5452 - 5313.8}{20} = \frac{138.2}{20} = 6.9$

Based on the reliability test formula:

$$r = \frac{K}{K-1}\left[1 - \frac{M(K-M)}{KS^2}\right]$$

$$r = \frac{K}{K-1}\left[1 - \frac{M(K-M)}{KS^2}\right] = \frac{25}{25-1}\left[1 - \frac{16.3(25-16,3)}{25(6,9)^2}\right]$$

$$r = \frac{25}{24}\left[1 - \frac{16.3(8,7)}{25(47,61)^2}\right] = 1,04\left[1 - \frac{141,81}{1190,25}\right]$$

$$r = 1,04[1 - 0,12]$$

$$r = 1,04[0,88]$$

$$r = 0,92$$

The calculation of reliability showed that the test was 0, 92. It means that the test can be said as the reliable test.

Technique for Analyzing Data

The data will analyzing by applying t-test, finally, the significant of the sum, the t-test and t-table will compare with the degree of freedom (df) of the test, the t-test as follow:

$$t = \frac{Mx - My}{\sqrt{\left(\frac{x^2 + y^2}{N_x + N_y - 2}\right)\left(\frac{1}{N_x} + \frac{1}{N_y}\right)}}$$

Where : Mx = mean of experimental group

My = mean of control group

X^2 = The deviation score of experimental group

Y^2 = The deviation score of control group

Nx   = The total sample of experimental group

Ny = The total sample of control group.

From the data in appendix C:

Mx = 41,4

My = 34,2

X^2 = 1329,6

Y^2 = 39966,4

Nx = 40

Nx $= 40$

$$t = \frac{41,4 - 34,2}{\sqrt{\left(\dfrac{1329,6 + 3966}{40 + 40 - 2}\right)\left(\dfrac{1}{4} + \dfrac{1}{40}\right)}}$$

$$t = \frac{7,2}{\sqrt{\left(\dfrac{5296}{78}\right)\left(\dfrac{2}{20}\right)}}$$

$$t = \frac{7,2}{\sqrt{3,395}}$$

$$t = \frac{7,2}{1,843}$$

$$t = 3,91$$

Testing Hypothesis

The basis for testing the hypothesis were as follows:

Ha is accepted if T-value > T-table. In this study, the calculation of the scores by using T-test for the degree of freedom (df) 78 at level significance 0,05 where the T-critical value is 2,00.

The result of computing the T-test shown that T-value is higher than T-table or it can be seen as follows:

(T-test) T-value > T-table (0,05) with df 78

3,91 > 2,000 (0,05) with df 78

Researching Finding

After collecting and analyzing the data as well as giving the treatment, the result of the experimental and control group showed that the students' achievement taught by using schemata technique higher than the conventional way.

4.CONCLUSSION AND SUGGESTION

4.1 Conclusion

Having analyzed the data thoroughly, the conclusion is schemata technique can give significantly the effect on the students' mastery of speaking. It also makes the students more social and active, more independent in the classroom and also makes the students more interested in the subject.

4.2 Suggestion

Based on the result of the research, the following suggestions are given:

1. Because the schemata technique has an effect on the students' mastery of speaking, it is suggested to apply it in teaching room because by using this method, the teaching-learning process can be very enjoyable and the students are motivated to explore more about English.

2. Teachers should look for the other interesting method and develop it to their students so that the students don't learn monotonously.

3. The teacher has to give the interesting topic to be developed by the students.

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