

THE EFFECT OF USING BRAINSTORMING METHOD ON STUDENTS SPEAKING ACHIEVEMENT OF THE ELEVENTH YEAR STUDENTS OF SMK NEGERI 1 STABAT

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This study was conducted as an attempt to discover the effect of using brainstorming method on students' speaking achievement. It was an experimental research. The subject was students of Grade XI, Vocational High School (*Sekolah Kejuruan Atas: SMK Negeri 1 Stabat*), which consisted of 72 students as a sample of this research. The research was divided into two groups: experimental and control groups. The instrument used to collect the data was oral test. The data were analyzed by using t-test formula. The analyze showed that the scores of the students in the experimental group were significantly higher than the scores of the students in the control group at the level of significance 0.05 with the degree of freedom (*df*) 70, t-observed value $4.7 > t$ -table value 1.99. The findings indicated that using Brainstorming Method significantly affected the students' speaking achievement. So, English teachers are suggested to use Brainstorming method in order to improve students' speaking achievement

Keywords: *Speaking, Teaching Speaking, Brainstorming Method*

1. Introduction

Speaking English needs constant practice, especially for those who study English as a foreign language. "The proficiency in speaking English is highly required in this era of globalization and challenges so that this skill should be mastered by learners in order to be successful in learning languages".¹ However, it is a bit difficult to learn because in speaking the speaker just has a little time for planning their utterances.

By speaking, the students can express what is in their mind. They can convey their ideas, their thoughts, their opinions and exchange the information with one another. They can also carry out conversation with others because others will not know what they are thinking about if they do not express or speak up. "When someone can speak a language it means that they can carry on a conversation reasonably competently".² Therefore, speaking is needed a lot.

The main point in speaking is about how to deliver messages to the listeners so that they can understand what the speakers mean. In every day communication, spoken exchanges take place because there is some sort of information gap between the participants. "Speaking is like any other skill, such as driving or playing a musical instrument: the more practice you get, the more likely it is you will be

¹ Roslinda Sidabutar. *Thesis: The Effect of Snowball Throwing Method on Students' Speaking Achievement*. English Education Department. (Medan: University Negeri Medan, 2016). p. 3.

² Harold Douglas Brown. *Teaching by Principles: An Integrative Approach to Language Pedagogy*. (New Jersey: Prentice Hall, 2001). p. 59.



able to chunk small unit into larger ones”.³ “The more time students have to study the facts, a principle or practice a skill, the better they learn”.⁴ In shorts, that much more of practice is really needed to enable students to speak up.

Besides, motivation also affects students’ speaking ability. “When students walk into an attractive classroom at the beginning of a course, it may help to get their motivation for the process going but when they come to an unattractive place, motivation may not be initiated in this way”.⁵ So, the teacher has to create a good learning environment to build the students’ motivation in every single learning activity.

The problem that are faced in teaching speaking are the low of motivation and sometimes the fear of making mistakes when they speak English. Based on the writer’s experience when doing teaching practice observation in SMK Negeri 1 Stabat, the writer found that students were not interested to take part in the classroom. The teacher just used lecturing method. The activities of teaching only gave the examples to the students then asked them to create their own sentence and practiced it in front of the class.

Because of that, they had low achievement in speaking and difficulty for expressing their ideas in English. They did not have enough courage to speak up and to share their thoughts because it was uncommon for them to express their opinion orally. The such things happened not because they did not have any knowledge about the material but because they were lack of grammar and they did not know the appropriate words to say it in English. Thus, they just kept silent because they were afraid of making mistakes.

In teaching English, there are various kinds of methods required. To make the students have strong interest and high motivation in teaching and learning process especially in learning speaking, teacher should apply the best method to improve students’ speaking ability. Teacher should be able to create the good atmosphere in learning. The chosen method can make the students enjoy the class, take part actively in the learning activities, and support the students to take much more chances to increase their capability in speaking. But in fact, the teacher did not apply the suitable teaching method like what the writer found during his intensive teaching practice program.

The activities in the speaking class seem to be boring and less interactive because the teacher uses the monotonuos method. It can be seen from the speaking activities in the class which only drilling the materials from text book, creating conversation in pairs and then presenting in front of the class. It causes the students to feel bored and have low motivation in joining the speaking class. “The failure of teaching might be caused by the teachers themselves and the techniques of teaching. In this case the students can study actively if the technique or method used by teacher is interesting and challenging”.⁶

One of the appropriate and comprehensive methods for teaching speaking is Brainstorming method. Brainstorming is a group or individual creativity method by which efforts are made to find a conclusion for specific problem by gathering a list of ideas spontaneously contributed by its members. By using brainstorming method, the writer tries to make students speaking easily and the students will be free to think and give information about the topic. The students can also be responsible for recording

³ Scott Thornburry. *How to Teach Speaking*. (Hartow: Pearson education Ltd, 2005). p. 92

⁴ Michael John Wallace. *Action Research for Language Teacher*. (Cambridge: Cambridge University Press, 2004). p. 127

⁵ Jeremy Harmer. *The Practice of English Language Teaching*. (Harlow: Longman, 2007). p. 113.

⁶ Rabiah Al Adawiyah. *Thesis: The Effect of Using Storytelling Through a Video on Students’ Speaking Ability*. English Education Department. (Medan: University Negeri Medan, 2015). p. 3.



the thoughts and ideas which are simply written up on a wall, flip chart or blackboard for all to see. By applying this method teacher will make students increasing their participation in receiving lessons, even the students will feel free and happy so that democratic atmosphere and discipline can be grown in the class.

2. Review Of Literature

2.1 Speaking

In learning English, there are four skills that should be mastered. They are listening, writing, reading, speaking. Speaking is the most essential skill because it is part of our daily life. It is the productive skill in the oral activity. It is more complicated than it seems at first. Language production activities fall at the communicative end of communication continuum.

“Speaking is fundamental to human communication and communication through speaking is performed face to face interaction and occurs as part of a dialogue or other form of verbal exchange”.⁷ In other hand, “speaking is an interactive process in which an individual alternately takes the roles of speakers and listener, and which includes both verbal and nonverbal component”.⁸ “Speaking is the process of building and sharing meaning through the use of verbal and non-verbal symbols, in a variety of contexts”.⁹ It means speaking is interaction between speaker with listener. “Speaking means negotiating intended meanings and adjusting one’s speech to produce the desired effect on the listener”.¹⁰

From the statements above, writer concludes that speaking is an interactive process of conveying ideas, or feeling that involves producing and receiving information using verbal language. The main goal of speaking is to build a communication between a speaker and a listener in interactive ways.

“The mastery of speaking skills in English is a priority for many second-language or foreign-language learners”.¹¹ Many language learners think that the ability in speaking is a benchmark of knowing a language. They really want to be able to speak fluently. To achieve this goal, the teacher should give big chance for the learners to involve in the speaking activities because they are the people that need to practice. Before they learn how to speak fluently, they need to recognize that speaking involves three areas of knowledge:

1. Mechanics (pronunciation, grammar, and vocabulary): using the right words in the right order with the correct pronunciation.
2. Functions (transaction and interaction exchange): knowing when clarity of message is essential (transaction/information exchange) and when precise understanding is not required (interaction/relationship building).
3. Social and culture rules and norms (turn-talking, rate of speech, length of pauses between speakers, relative roles of participants): Understanding how to take into account who is to whom. In what circumstances, about what, and for what reason.

⁷ Henry G. Widdowson. *Teaching Language as Communion*. (New York: Oxford University Press, 2008). p. 71.

⁸ Nancy A. Mead and Donal L. Rubin. *Assessing Listening and Speaking Skill*. Eric Digest. (USA: Washington, DC, 1985). p. 14.

⁹ Ann Lansing Chaney and Tamara L. Burk. *Teaching Oral Communication in Grade K-8*. 1998. p. 105.

¹⁰ J. Michael O’Malley and Lorraine Valdez Pierce. *Authentic Assessment for English Language Learners*. (Addison-Wesley Publishing Company, 1996). p. 60.

¹¹ Jack C. Richard. *Teaching Listening and Speaking: Journal From Theory to Practice*. (USA: Cambridge University Press, 2008). p. 7.



“Teaching speaking is not as easy as we thought. There are several problem faced in teaching speaking:

1. Learners are given speaking task that fail to motivate them to speak.
2. During speaking task, learners engage in off-task behaviour and rever to the mother tongue.
3. Lessons that offer learners few opportunities to use the language independently or spontaneously.
4. Anxiety on the part of learners which make them reluctant to take risk in using the language, perhaps for fear of making a mistake or losing face in front of peers.
5. Speaking task are set which are beyond learners, language capabilities.
6. Teacher-fronted lesson which offer limited opportunities for learners to practice their oral skill.
7. Learners uncertainty about pronunciation, learners lack of strategies to make up for gaps in their knowledge, to keep the conversation going”.¹²

So, it can be concluded that to achieve the speaking ability, teacher should be able to create good activities in teaching speaking. In order to create good speaking activities, teacher must considered several factors that affect speaking. All the things in teaching speaking class should be able to avoid some sorts of problem above.

“Assessment is one of the important things which has an important role in education. Assessment is formative when teacher uses it to check on the progress of their students, to see how far they have mastered what they should have learned, and then use this information to modify their future teaching plans”.¹³ In short, we can conclude that a teacher can use the result of assessment to analyze the material delivered to the students and the instruments that should be repaired. Assessment process can also help the teacher to know the ability of each student. Assessment is held at end of a unit of study. It is used to measure the understanding degree of the students to the subject.

We can see that Foreign Service Institute (FSI) had a high validity. Therefore the proficiency description of FSI in Fulcher (2003) is used to score the test.

Table 2.1 FSI (Foreign Service Institute)

Proficiency	1	2	3	4	5	6
Description						
Pronunciati on/Accent	0	1	2	2	3	4
Grammar	6	12	18	24	30	36
Vocabulary	2	8	12	16	20	24
Fluency	2	4	6	8	10	12
Compreh	4	8	12	15	19	23

2.2 Brainstorming

Brainstorming is a popular method that helps the students generate creative solutions to a problem. It is particularly useful when they want to break out of stale, established patterns of thinking, so that they can develop new ways of looking at things. It also helps to overcome many of the issues that can make group problem-solving a sterile and unsatisfactory process.

¹² Susan Graham. *Communicating with Parents. The School Community Journal*. (Canada: Georgian College). p. 83.

¹³ Arthur Huges. *Testing for Language Teachers*. Second Edition. (United Kingdom: Cambridge University Press, 2003). p. 12.



In 1938, Alex F. Osborn, an advertising executive, invented the process of “organized ideation” in a company he headed. The early participants referred to their attempts as “brainstorming session”, in the sense that they were using the brain to storm a problem. The term *Brainstorming* has now become the accepted way of referring to group attempts to solve specific problems or develop new ideas by amassing spontaneous, unrestrained contributions by members.

“Brainstorming can be used to generate possible solutions for simple problems, but it is unrealistic to expect it to accomplish most problem-solving or planning tasks. The value in a session that is designed solely to produce a list of ideas that can be used later in problem solving or other creative processes. The key to the success of the process is that no evaluation or judgement is made of the ideas as they are being generated. Because of this, creativity is not stifled, it is increased”.¹⁴

“Brainstorming as a group creativity forum for general ideas. Brainstorming was developed by Alex Osborn to produce ideas without inhibition. Brainstorming method involves oral and pre-writing exercises for helping the learners and for expressing ideas by the teacher”.¹⁵

“Brainstorming has a great importance in the teaching process. Referred to its importance for students as follows: a) Helps students to solve problems, an innovative solution; b) Helps students to benefit from the ideas of others through the development and build on them; c) Helps the cohesion of the students and build relationship among them and assess the views of others”.¹⁶

Its importance of brainstorming for teacher referred to in Humaidan (2005) helps the teacher to conclude ideas that are broader than students’ thinking solutions make the teacher more democratic and respectful of views regardless of the different points of view.

The major purpose of brainstorming as teaching method is to foster and enhance communication skill, help to promote thinking and decision-making skill as well as foster different viewpoints and opinions. It may equally be used in all key areas of learning. However, the major limitation is that it is generally not suitable for younger level because of the level of reasoning required in order for it to work. The teacher must equally be able to guide and give aid as necessary considering the class environment as such considerations often determine the outcomes. In brainstorming method, the teacher carefully plans the lesson to reach the desired learning outcomes. The group interacts in response to questions, and the teacher refrains from entering the discussion as an active participant. Students are encouraged to learn about the subject by actively sharing information, experiences, and opinions. The flow of communication is a transaction among all students rather than recitation and response between individual students and the teacher.

3. Research Methodology

This study was conducted in experimental design because its purpose was to find out the effect of using Brainstorming method on students’ speaking achievement. There were two variables in this study, namely students’ achievement on speaking ability as dependent variable and Brainstorming method as independent variable. In conducting an experimental research, the subject was divided into two groups, they were experimental group and control group. The experimental group was the group

¹⁴ Alex Osborn. *Your Creative Power*. (USA: Hamilton, 2009). p. 98.

¹⁵ Abdallah Al-maghawiry. *Effectiveness of Using the Brainstorming Technique to Learn Some Basic Skills: World Journal of Sport Sciences*. (USA: Cambridge University Press, 2012). p. 4.

¹⁶ Abdulrahman Zeitoun. *Method of Teaching Science, Creative Solutions of Problems: Theory and Practice*. (Bahrain: Dar Al-hikma Press, 2001). p. 32.



that is taught by using Brainstorming method while the control group was taught using conventional method.

The pre-test was administered to both groups before treatment. The post-test was given after the treatment. The design of this research can be seen in the following table:

Table 3.1 Research Design

Sample	Pre-Test	Treatment	Post-test
Experimental Groups	T1E	Brainstorming method	T2E
Control Group	T1C	Without Brainstorming method	T2C

“Population is a group of individuals that have some more characteristics in common that are interest to researcher”.¹⁷ It means that population is any group of individuals that researcher decides to be analyzed. The population of this study was the eleven grade students for Technique Major at SMK Negeri 1 Stabat. There were 7 parallel classes. It means there were 14 classes for the eleven grade students in SMK Negeri 1 Stabat but the most of the classes were doing PKL (*Peraktek Kerja Lapangan*). That was why the writer would do this research on the rest of the classes. Each class consisted of 36 students. So, the total number of the population was 252 students. The population of this research can be seen in the following table.

Table 3.2 The Research Population

No	Classes	Amount
1.	Teknik Gambar Bangunan (TGB)	36
2.	Instalasi Tenaga Listrik (ITL)	36
3.	Teknik Pemesinan (TP)	36
4.	Teknik Kendaraan Ringan (TKR)	36
5.	Teknik Sepeda Motor (TSM)	36
6.	Teknik Audio Video (TAV)	36
7.	Teknik Komputer Jaringan (TKJ)	36
TOTAL		252 uidents

Sample is representative of the majority or the population studies.¹⁸ The research sampling was done by random sampling technique as research. There were two classes from 7 classes observed. Two classes were taken randomly as the sample to represent the entire population. Then, the sample was randomly taken through a lottery. Firstly, the writer wrote the classes on a piece of paper then put it in the box and two pieces of the paper were taken by teacher randomly. The two classes were divided into two groups namely experimental group and control group. And the result was class XI TKJ became experimental group and class XI TGB became control group.

Table 3.3 The Research Sample

No	Classes	Status	Amount
1.	Teknik Komputer Jaringan (TKJ)	Experimental	36
2.	Teknik Gambar Bangunan (TGB)	Control	36

¹⁷ John William Best and James Khan. *Research in Education 7th*. (New Delhi: Prentice Hall, 2002). p.

¹⁸ Suharsimi Arikunto. *Prosedur Penelitian Kelas Satu Pendekatan Praktik. Revisi VI*. (Jakarta: PT. Rineka Cipta,2006). p. 173.



TOTAL	72 Students
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In this study, the writer used oral test as the instrument for collecting data. The teacher gave some cases or situations to students and asked for students' argumentation either in the positive side or in the negative side of the topic. Then, every couple of students were asked to give argument about the cases or the situations given in front of the class. One student for negative side and one student for positive one. In collecting data, the writer would record students' performance during the test and then transcribe it. Then, their speaking performance was scored based on several aspects namely accent, grammar, vocabulary, fluency, and comprehension. The t-test assessed whether the means of two groups were statistically different from each other. This analysis was appropriate whenever the researcher wanted to compare the means of the two groups.

4. Data Analysis And Research Findings

4.1 Data Analysis

The complete data of the students were presented in the next table. The experimental group was the first and then it would be followed by the control group. The students' name is initially signed.

Based on the data analysis, the sample of the experimental group was 36 students. There were several aspect that affected speaking score namely Pronunciation, Grammar, Vocabulary, Fluency, and Comprehension. The American Foreign Service Institute rated a six-point scale for each of the aspects. Then, these ratings were weighted and totalled. The following was the six-point scale table to rate the aspects of speaking.

The highest score of pre-test in experimental group was 74 while the lowest score of pretest in experimental group was 34. And the highest score of post-test in the experimental group was 82 and the lowest score of post-test in experimental group was 65.

The sum of deviation was 610 and the sum of standard deviation was 11384. Then the mean of experimental group that the writer got was 16,94 and the standard deviation of experimental group was 1047,9.

From The Control Group, the sample of the control group was 36 students. There were several aspect that affected speaking score namely Pronunciation, Grammar, Vocabulary, Fluency, and Comprehension. The American Foreign Service Institute rated a six-point scale for each of the aspects. Then, these ratings were weighted and totalled. The following was the six-point scale table to rate the aspects of speaking. the result of Pre-test and Post-test of control group. The highest score of pre-test in control group was 74 while the lowest score of pretest in control group was 34. And the highest score of post-test in the control group was 82 and the lowest score of post-test in control group was 65 and the mean of control group that the writer got was 10,75 and the standard deviation of control group was 1176,8.

From the calculation above, the data obtained were mean of experimental group or M_a was 16,94. The mean of control group or M_b was 10,75. The standard deviation of experimental group or d_a^2 was 1047,9. The standard deviation of control group or d_b^2 was 1176,8. The total sample of experimental group or N_a was 36, and the total sample of control group or N_b was 36.

The result of t-test formula was 4,7 in other word t_{hitung} was 4,7. The degree of freedom (df) = the total numbers of experimental group (Na) + the total numbers of control group (Nb) - 2, $36+36-2 = 70$. t-table at level significance $\alpha = 0,05$ was 1,99.

4.2 Research Findings

In this research, the score of samples were calculated by using t-test at the level of significance $\alpha = 0,05$. Based on the calculation, the both means of score of control group and experimental group are different. The mean score of the Experimental Group was higher than Control Group mean and the calculation of the t-test shows that the t-observed (4,7) was higher than t-table value (1,99). It means that there was a significantly effect against the students' speaking achievement using Brainstorming method.

5. Conclusions

After analyzing the data collected, the writer draws conclusion as the following:

1. The critical value of t-observed (4,7) is higher than the value of t-table (1,99). This means that the null hypothesis is rejected and the alternative hypothesis is accepted.
2. The students who taught by using brainstorming method got better achievement in speaking English than those taught by using conventional method.
3. Brainstorming method is an interesting and active method that can improve the students' speaking skill and motivate the students to speak.

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