

# USING MODIFIED JIGSAW FLASHCARD LEARNING MODEL TO PROMOTE STUDENTS' SPEAKING SKILL AT SMA AL ISMAILIYUN SUKADAMAI NATAR

**Arief Wisudiyantoro**

Magister English Education of Teacher Training and Education Faculty, University Lampung

**Cucu Sutarsyah**

Teacher Training and Education Faculty, University Lampung

**Muhammad Sukirlan**

Teacher Training and Education Faculty, University Lampung

Email: [muhammad\\_sukirlan@yahoo.co.id](mailto:muhammad_sukirlan@yahoo.co.id)

## ABSTRACT

This article points out the significant difference of students' speaking skill before and after the implementation of modified jigsaw flashcard, how is the process of jigsaw flashcard modification in teaching speaking, and how the implementation of modified jigsaw flashcard affects students' speaking skill. This is a quasi-experimental research with one group pre-test post-test design. It applies the modified jigsaw flashcard on students' speaking skill. Based on the research finding, it can be concluded that the implementation of modified jigsaw flashcard is effective to increase student's speaking skill. Students' speaking skill after using modified jigsaw flashcards is increased. Based on the calculation, the pretest that consists of 25 students has mean score 67.12 for the pretest and the posttest has mean score 75.52. The result of calculation shows that sig (2 tailed) is 0.000. It means that  $\text{sig} < \alpha$  ( $p < 0.05$ ;  $p = 0.000$ ). It can be concluded that  $H_0$  is rejected and  $H_1$  is accepted that there is difference of students' speaking skill after being taught by using modified jigsaw flashcards and there is significant improvement between pretest and posttest. Thus, the process of jigsaw flashcard modification in teaching speaking is effective in teaching speaking especially in promoting the aspect of vocabulary. Lastly, the implementation of modified jigsaw flashcard affects students' speaking skill. Hence, students can relate vocabulary words to their own background or experience. Thus, it involves students in thinking, reading and speaking. At last, it engages the students as active learner.

**Keywords:** Students' speaking skill, Modified jigsaw flashcard, Learning model.

## ABSTRAK

Artikel ini membahas hasil perbedaan yang signifikan pada keterampilan berbicara siswa sebelum dan sesudah penerapan modifikasi jigsaw flashcard, bagaimana proses modifikasi jigsaw flashcard dalam pengajaran berbicara, dan bagaimana penerapan modifikasi jigsaw flashcard mempengaruhi keterampilan berbicara siswa. Penelitian ini merupakan penelitian kuasi-eksperimental dengan satu kelompok desain pre-test dan post-test. Penelitian ini menerapkan modifikasi jigsaw flashcard pada keterampilan berbicara siswa. Berdasarkan hasil penelitian, dapat disimpulkan bahwa penerapan modifikasi jigsaw flashcard efektif untuk meningkatkan keterampilan berbicara

siswa. Keterampilan berbicara siswa setelah menggunakan jigsaw flashcards yang dimodifikasi meningkat. Berdasarkan perhitungan, pretest yang terdiri dari 25 siswa memiliki skor rata-rata 67,12 untuk pretest dan posttest memiliki skor rata-rata 75,52. Hasil perhitungan menunjukkan bahwa sig (2 tailed) adalah 0,000. Hal tersebut bermakna bahwa sig  $< \alpha$  ( $p < 0,05$ ;  $p = 0,000$ ). Dapat disimpulkan bahwa  $H_0$  ditolak dan  $H_1$  diterima dan bermakna bahwa ada perbedaan keterampilan berbicara siswa setelah diajarkan dengan menggunakan jigsaw flashcards yang dimodifikasi dan ada peningkatan yang signifikan antara pretest dan posttest. Dengan demikian, proses modifikasi jigsaw flashcard dalam pengajaran berbicara efektif untuk mengajar berbicara terutama dalam meningkatkan aspek kosa kata. Terakhir, penerapan modifikasi jigsaw flashcard mempengaruhi keterampilan berbicara siswa. Oleh karena itu, siswa dapat menghubungkan kata-kata ke latar belakang atau pengalaman mereka sendiri. Dengan demikian, ini melibatkan siswa dalam berpikir, membaca dan berbicara. Akhirnya, hal tersebut melibatkan siswa sebagai pelajar aktif.

**Keywords:** Students' speaking skill, Modified jigsaw flashcard, Learning model.

## A. INTRODUCTION

English is very important to learn because English is an international language; it means that by knowing English well you are going to be able to communicate with the foreigners with different language and culture. In Indonesia, English is the first foreign language taught at school and is considered as an important subject to acquire the knowledge, and to develop technology, art, and culture. English is one of subject which is taught from kindergarten to University level. Based on the school curriculum for English, teaching English is a subject that consists of four skills such as listening, speaking, reading and writing. Moreover, there are some elements of language that should be taught to develop these four skills, they are; grammar, vocabulary, pronunciation, and spelling.

Basically, all of English skills and English elements are important, but speaking is the most important skill that should be mastered by English learner. Speaking ability is used to describe how far the language learner has mastered the language itself. Turk (2003:20) spoken language was the first form of communication between human beings. It can be inferred that speaking is the first skill that should be taught first when someone learns about a language.

Language ability can be measured by four language skill; however, people usually judge the language skill from how well someone is able to speak in language itself. The professionals are expected to have good speaking skill in influencing someone, for example politicians, teacher, lawyer and even a president. Speaking is then able to be said as an activity in which people use their voice to deliver their opinion, suggestion, information even critic. When we talk about something of course there are many elements that we should understand i.e., the topic of what the speaking about, vocabulary, grammar, and intonation. It will be easier for the speaker to divide the important things from the topic that will be asked to the listeners. The second element is vocabulary, it is important for speaker in order to speak well at least the speaker has enough vocabularies to express some idea. The last one is intonation; by using the appropriate intonations, probably make the information successfully transferred to the listeners. All of the elements are needed to make a good understanding between speaker and listener.

According to Richards (in Nunan, 1999: 226) speaking is one of the four language skills that are taught in English teaching. The objective of teaching speaking is the ability of the students to communicate with other speakers in the target language. In order to be able to communicate, language learners need to have communicative competence. Communicative competence includes knowledge of grammar and the vocabulary of the language, knowledge of rules in speaking, knowing how to use and respond to different types of speech acts, and knowing how to use language appropriately.

Brown (2007:267) claims that speaking is the treat of oral communication skills which is simply labeled as “Speaking” courses. And speaking skills are an important part of the curriculum in language teaching, and this makes them an important object of assessment as well. In addition, speaking is one way to communicate with ideas through a message orally. To enable students to communicate, we need to apply the language in real communication (Saputra, 2018: 113).

Based on all statements above, it can be inferred that speaking skill is an important skill to be mastered when someone want to communicate in English foreign language. Speaking skill becomes the most important skill since people have belief that language mastery is able to be judged from how well someone speaks. In language teaching, language is essentially speech. Someone on his or her daily life needs to be able in using English as good as possible in order to make a comprehensible situation in speaking. In addition, the language function should also be involved in this skill which it involves the use of grammar, comprehension, fluency, and all of these should be used appropriately in a social interaction. Therefore, the appropriate method and technique are needed to improve students’ speaking skill.

On the other hand, a large number of students in SMA Al Ismailiyun Sukadamai Natar find it hard to master speaking skill. It is caused by some factors. The first factor comes up from the student. Mostly, the students keep silent when learning English. Here, the problems are the students’ limitation on vocabulary mastery and the low motivation to practice make the meaning is not conveyed well in the process of communication. Most of them do not understand how to speak well, they feel speaking English is so hard to do. They are afraid of making mistake if they are speaking English. When the students found new vocabulary, they did not usually understand the right pronunciation. In addition, the utterance is also full of grammatical errors. It makes them hesitant. Furthermore, the teacher’s feedback or correction on the wrong moment also contributes on their unreasonable fear to speak English well.

Furthermore, most the students are not confident and shy to speak English and engaged autonomously with their peer in learning process. It happens because the characteristics of adolescents tend to have high self-ego and sensitive for self-correction. They just need an interesting technique or strategy to stimulate their peer-interaction and cooperation among members. The technique is expected to help students improve their social skills on communication and also their speaking skills.

The second factor comes up from the teacher him/herself, it goes without saying that speaking is rare to be used in classroom daily activities because speaking is not used in final examination, so teacher does not teach the student how to speak fluently. They are always taught in reading and writing skill only. Thus, the method or technique is not interesting for the students to support their speaking activities in class. So, the students are not motivated to practice speaking effectively. Another problem from teacher is related to opportunities that are given to the students itself. Speaking needs more allocation time to practice. So, practicing in group is one way to facilitate

and give the students more chances to ask, respond, give a comment without afraid to make mistakes.

Teacher as a facilitator in the class has to know how to make variety technique to do different way while teaching in the classroom. As an English teacher, we should know how to make the students more understand with the explanation. The main problem always comes from the meaning of each word. Because English is our foreign language not our mother language, as an English teacher we have to know how to make our students easy to understand when we deliver English lesson in the class. When learning a foreign language, our individual vocabulary in that language is one of the most important micro skills to develop. Of course, all micro skills like grammar, vocabulary and pronunciation are important. But it is far more difficult to communicate with no vocabulary than with no grammar.

According to Setyadi, et.al. therefore, there are three features of speaking activities to bridge the classroom and the real world practice opportunities for purposeful communication in meaningful situation. The students in speaking activities need to be given a lot of oral opportunities to practice the language suited to the real life communication.

There are about six similar categories that can be applied to the kinds of oral production that students are expected to carry out in the classroom. There are imitative, intensive, responsive, transactional (dialogue), interpersonal (dialogue), and extensive (monologue). The first student must be trained to use patterns in carefully graded oral drills. Since the study is more difficult than the study on the speech perception or comprehension, so linguist use a less direct method, i.e., by the speech error or the speech disfluency to get insight into how the process is accomplished by the speaker.

Use techniques that cover the spectrum of learner needs, from language based focus on accuracy to message-based focus on interaction, meaning, and fluency. In our current zeal for interactive language teaching, we can easily slip into a pattern of providing zesty content-based, interactive activities that do not capitalize on grammatical pointers or pronunciation tips. Considering the condition above, the researcher proposes to implement jigsaw to promote students' speaking skill.

Jigsaw is a cooperative learning which each member of a group was assigned a different part of material. Then, all the students from different groups who had the same learning material gathered together and formed an "expert group" to discuss and communicate with each other until they all mastered the material. Later, the students returned back to their home group to teach the material to other members of their group (Mengduo and Xiaoling, 2010). It is in line with Isjoni 2011; Slavin, 2005; Sahin, 2010 who states that jigsaw is one of cooperative learning technique which suggests students more active and responsible for each other in comprehending the material to get the achievement maximally.

Furthermore, Mattingly and Van Sickle in Mayer & Alexander (2011: 356-357) define the jigsaw technique as group work that group members share the same section and then join with another pair of students. If the sections are more open-ended so there is no single right answer, or if students are encouraged to take notes during the focus groups to provide a support when the original groups re-assembles. It means when group members are doing the jigsaw technique, they have all the pieces or few pieces in front of them. Each group has a different part with other groups which may be information from a story or factual fact, parts of picture or comic strip, parts of short explanation of relating materials, have to be fitted together to find the solution.

That is why the jigsaw technique is said to improve cooperation and mutual acceptance within the group and well-known for cooperative learning. In this context, the group members also have to do a lot of talking before they are able to fit the pieces together in the right way.

In addition, Burkart (1998) states that the jigsaw technique is focused in group working and more elaborate information gap activities that is able to build the students' bravery and communication ability with other people or friends because by using this technique each student gets one or few pieces of the "puzzle". With that piece, students are expected to share, retell the story or discuss certain topic with English language in their group or other group and also can give opinion or response from other students' opinion to fit all the pieces and get meaningful information.

Based on some definition above, it can be concluded that the jigsaw technique is a kind of group work that the students are expected to share the information, retell the story, or discuss the certain topic with other members in the same and in the different group to get meaningful information and find the solution. Besides, because each group has different part of information, the group members have to make a good cooperation with involving actively in order collecting all the pieces together.

But, it will be good and creative if the teachers modify jigsaw to make the class more active, because as we know that most of High/Vocational School students are attractive students with their different characters. Therefore, the researcher modifies the jigsaw with flashcard to make the class more active and attractive. It was due to the use of flashcard was effective to teach vocabulary as one of aspect in speaking (Khodareza & Komachali, 2012).

As stated on the previous sub topic that jigsaw technique is a kind of group work that the students are expected to share the information, retell the story, or discuss the certain topic with other members in the same and in the different group to get meaningful information and find the solution. Besides, because each group has different part of information, the group members have to make a good cooperation with involving actively in order collecting all the pieces together. Thus, flashcard is a cardboard consisting of a word, a sentence, or a simple picture on it (Khodareza & Komachali, 2012). Furthermore, flashcard (in language teaching) is a card with words, sentences, or pictures on it, used as an aid or cue in a language lesson (Richard & Schmidt, 2010:222). Flashcard is considered as a helpful teaching aid because of its benefits. Moreover, teachers can also use flashcards for drilling and presenting new words. The primary advantage of flashcards over other review techniques is that since the cards are easy to carry around, you can review them often and quickly. Frequent review of cards is what makes them effective. Short reviews frequently repeated will generally be more effective than long sessions of cramming. Objections about flashcards usually state that "they take too long to make." Keep in mind, however, that blank cards can be inexpensively purchased now and writing down of the material on the cards themselves is itself an aid to memory. Furthermore, there are now many online websites for making free flashcards (e.g., <http://www.flashcardmachine.com/>). It is also important to make the cards throughout the course, not just before the exam (Academic Enrichment & Support Center (AESC) of Bethel University, 2010).

It can be concluded that modified jigsaw flashcard is one of the cooperative learning techniques which is based on group dynamics and social interactions which combines a cardboard consisting of a word, a sentence, or a simple picture on it as the teaching aid. In line with the background of research above, the researcher states the objectives of the research are to find out: 1) what problems do students face in the implementation of modified jigsaw flashcards in teaching

speaking; 2) the significant difference on students' speaking skill before and after being taught by using modified jigsaw flashcards; 3) how can the implementation of modified jigsaw flashcards affect students' speaking skill.

## **B. RESEARCH METHODS**

In this research, the researcher used experimental design because the purpose of this research is to investigate the influence of using jigsaw flashcard learning model strategy towards students' speaking skill. Frankel (2008) states that experimental research is one of the most powerful research methodologies the researcher can use. An experimental design is the general plan for carrying out a study with an active independent variable. Ary (2006) agreed that the design is important because it determines the study's internal validity, which is the ability to reach valid conclusions about the effect of the experimental treatment on the dependent variable. The researcher concluded that experimental design is a research that conducted to know or investigate the influence of a treatment. This design is important because it determines the study's internal validity to reach valid conclusions about the effect of the treatment.

According to Ary (2006) experimental design may be classified according to how well they provide control of the threats to internal validity is: pre-experimental design, true experimental design, and quasi experimental design. Furthermore, the researcher used quasi-experimental design. Quasi experimental design includes assignment, but not random assignment of participants to groups. This is because the experimenter cannot artificially create groups for the experiment Creswell (2012).

Creswell (2012:310) states that the variety of quasi experimental design can be divided into two main categories. First is pre- and posttest design, and the second is posttest-only design. The researcher used one group pre- test and posttest design, the pre-test was used to know the students mastery before treatment. The post-test was given to the experimental class; the comparison was done between the result of the students' achievement before the treatment and after the treatment. The result of this comparison informs the researcher whether the model implemented works or not.

### **Research Population and Sample**

Fraenkel (2009) states that population is all the members of a particular group. It is the group of interest to the researcher, the group to whom the researcher would like to generalize the results of a study. The population of this research is all the students at the tenth grader of SMA Al Ismailiyun Sukadamai Natar in year academic 2017/2018. In addition, there are three classes in which each class consists of 25 students, and the total number of the students is 75 students.

After determining the population, a researcher should do the next plan that is determining the sample, because sample is any group of individuals that is selected to represent a population (Richard & Schmidt, 2010: 465). The sample of this research was determined by using purposive sampling. There are three classes of the tenth grader of SMA Al Ismailiyun Sukadamai Natar, in which the total number of the students are 75 students. However, the researcher just handles one class, that is X<sup>B</sup>. Therefore, the class of X<sup>B</sup> that consist of 25 students was determined to be the sample of this research.

### **Research Instrument**

In this research, the data is in form of quantitative data. It means that the data is implied in using numerical data or statistic (Gall et al., 2003:135). Thus, the technique of collecting the data is speaking test. The researcher uses the subjective test in form of performance test to get the scores of the effectiveness of teaching technique in teaching speaking skill. At this point, the students were given an instruction to perform an oral monologue based on the given theme. The assessment is scored on a point scale based on well-defined criteria (a rubric) that is presented in advance. The scoring is done by the teacher. There are four criteria/aspects that are employed in this scoring rubric.

The next instrument is interview. Interview is a conversation between an investigator and an individual or a group of individuals in order to gather information (Richard and Schmidt, 2010:298). According to Lodico, Spaulding, and Voegtle (2006) there are five types of interview, they are: one-to-one, Group Interviews, structured interview, Semi-Structured Interviews, Unstructured interviews. In this research, the researcher used semi-structured interview in order to get the detail information from the interviewee. In order to make the data of interview valid, the researcher uses triangulation theory. Setiyadi (2007) state that in triangulation of theory, data collection is collected based on different theory or by analyzing the same data with different theory.

Interview guide used to know the students' responses and motivation after following the teaching and learning process. Interview guide is a list of topics used by an interviewer during an interview. An interview guide helps the interviewer make sure that the important topics have been covered during the interview (Richard and Schmidt, 2010:298). This interview guide would be given in the beginning and at the end of treatment. Besides, it was also used to know whether the strategy was helpful to solve the students' problem in writing or not.

The last is observation. Observation is the process of gathering open-ended, first-hand information by observing people and places at a research site (Creswell, 2005). In this research, the observation was used to find out the qualitative data. The researcher acted as a participant observer in collecting the data. The researcher used observation sheet then make a note during the teaching learning process in order to observe the students interaction and see how students dealt with their writing test. In addition, the researcher involves another observer to validate the data collected, that is, the researcher assistant as the non-participant observer, the English teacher who shared the same understanding about the objectives of the research and is also regarded as the capable observer.

Before the instrument is given to the students, the researcher conducted a try out test to find out the validity and reliability of the instrument. Based on the calculation, it is known that the score of validity is 0.929. It can be said that the instrument has very high level of validity. Thus, the score of reliability is 0.963. It can be said that the instrument has very high level of reliability.

## **C. RESULTS AND DISCUSSION**

The research was conducted in the tenth grade of SMA Al Ismailiyun Sukadamai Natar, from 17<sup>th</sup> February to 10<sup>th</sup> March 2018 by implementing modified jigsaw flashcard in speaking. This implementation was conducted every Tuesday and Saturday in a week. The class consisted of twenty-five students with thirteen girls and twelve boys.

On Saturday, 17<sup>th</sup> February 2018 at 12.30 – 14.00 a.m., the researcher conducted pretest as the first step in this research. Then, on Tuesday 20<sup>th</sup> February until Saturday 03<sup>rd</sup> March 2018 the researcher conducted the treatment of modified jigsaw flashcards in teaching speaking to the students. In this case, the treatment was started by greeting the students, inviting students to pray together, checking student attendance, introducing a learning strategy, that was modified jigsaw flashcards strategy in teaching writing to the students, and explaining the advantages of modified jigsaw flashcards in teaching speaking to the students. At last, posttest was given on March 10<sup>th</sup> 2017.

## **1. Problems in the Implementation of Modified Jigsaw Flashcard**

This section answers the research question number one, that is “what problems do students face in the implementation of modified jigsaw flashcard in teaching speaking?” In order to answer the research question number one, the researcher conducted an interview before the treatment to know the teaching learning process before conducting the treatment and what are the students’ problems in the teaching and learning process.

Based on the interview that researcher conducted to the tenth grader of SMA Al Ismailiyun Sukadamai Natar, the researcher got some valuable data relating to the implementation of modified jigsaw flashcards in teaching speaking. The data are as follow: The researcher found that some of the students find it hard to understand about the aspect of speaking skill such as vocabulary. According to Student 5 (one of students from grade X) “the speaking aspect such as vocabulary makes me a bit confuse to compose a descriptive monologue”. This condition is strengthened by Student 23 (one of students from grade X) who said that: “I do not brush up my English vocabulary, so it makes me difficult to master English, beside that I feel difficult in exploring my ideas because of that. Thus, I do not understand grammar, because it is so difficult to be understood and sometime I feel embarrassed if I have to speak in English or write something using English”.

Therefore, the limitation of students’ vocabulary mastery can be classified to be one of the biggest problems faced by the students in delivering a descriptive monologue. If the student does not master the aspects which must be scored in speaking, it will be error. In speaking skill, vocabulary as one of the speaking aspects has significant role in speaking. Of course, all micro-skills like grammar, vocabulary and pronunciation are important. But it is far more difficult to communicate with no vocabulary than with no grammar (Hudzaifah, 2016:2). Furthermore, Campillo (2007) said that vocabulary is obviously a very important element within a language as the over helming majority of meaning is carried lexically. We know that learn English not only learn vocabulary but also grammar, pattern or tenses, sentence and others, but we cannot produce very well at all if we do not learn about the vocabulary, we will have minimal words to say and limit understand the meaning if we have conversation in English with other people. That is why vocabulary is very important to learn. Therefore, it can be inferred that there are so many useful function of vocabulary in improving the language skill, such as developing speaking skill.

Based on the teaching learning process, the students were interested in learning speaking using jigsaw flashcards. Jigsaw flashcards made the students more active in teaching learning process, because they did more activities and they can deepen the aspect of vocabulary as one of the hardest aspects that the students has. Aronson (2000) states that the benefit of the jigsaw classroom is a remarkably efficient way to learn the material. But even more important, the jigsaw process encourages listening, engagement, and empathy by giving each member of the group an essential part to play in the academic activity. Group members must work together as a team to

accomplish a common goal; each person depends on all the others. No student can succeed completely unless everyone works well together as a team. This "cooperation by design" facilitates interaction among all students in the class, leading them to value each other as contributors to their common task. It means that the students can express their idea and their ability to solve the problems. Besides, the students are motivated to ask some questions if there is difficulty to their friends who are clever. This technique also increases the participation of the students in teaching learning process.

From those activities, the students could remember a lot of the new vocabularies in their mind. The jigsaw flashcards strategy procedures were fun to do in the teamwork. After applying modified jigsaw flashcards to the students of tenth grade of SMA Al Ismailiyun Sukadamai Natar in the academic year of 2017/2018, the researcher found some strength during the process. The strengths were: 1) most of students were active in teaching learning process because modified jigsaw flashcards gave more opportunity to explore during the activity in the class; 2) applying modified jigsaw flashcards helps students to solve their problems in learning speaking especially in solving the problem of vocabulary mastery because they are interested in using the strategy and they can explore many words easily. So, they can master a lot numbers of vocabularies.

The explanation above recommends the result of this research that modified jigsaw flashcards is effective in teaching speaking especially in promoting the aspect of vocabulary; however, the English teacher of SMA Al Ismailiyun Sukadamai Natar stated that sometimes the implementation of jigsaw is not in line with the teacher's hope. It causes an unclear instruction that makes the students feel difficult to understand the variation and teacher's creativity. Thus, there are still some problems in implementing the Jigsaw to the students, they are: 1) in the classroom learning, jigsaw is a time-consuming activity. The students need to spend their time in two groups by only learning a text; 2) there are some students who feel confused during jigsaw activity; 3) there are some students who are unable to handle their speaking material in jigsaw activity. Therefore, modifying is needed to help the teaching learning process better and more effective. As such, the researcher makes a modification of jigsaw related with the theory before in order to make the procedure and instruction clearly.

## **2. The Implementation of Modified Jigsaw Flashcard Affects Students' Speaking Skill**

The ability of students' speaking before using modified jigsaw flashcard is low, and even tends to be difficult to make a descriptive monologue. This particularly happens to Student 13 as one of students from grade X that: "Do you like speaking in English?" Student 13 said that "I feel difficult to study English. Especially writing and speaking in English". Same with Student 13, other students also said the same thing, they were also having difficulty in making a description in English. Student 22 of grade X said that: "I cannot speak in English, because I do not understand grammar, or tenses and I also do not master English vocabulary".

Most difficulty in students' English speaking comes from aspect of grammar or tenses (language use) used in designing a sentence. In addition, the word mastery is also still very limited to make a description. It is like described by Student 25 of grade X. Student 25 said that: "I feel difficult in describing an object, because I do not understand the formula and also less of English vocabulary. I feel like confused in speaking and I can't master the vocabulary. So, I also confused about the grammar. I feel so slow in speaking and confused in exploring my description".

Besides having trouble in speaking, students also experienced difficulty in following teaching and learning process. In addition, the students do not have good grammar skill and students are also difficult to understand the matter at learning English.

Based on what have been stated above, the researcher used modified jigsaw flashcard as solution to overcome difficulties to their students in following teaching learning process. Burkart (1998) states that the jigsaw technique is focused in group working and more elaborate information gap activities that is able to build the students' bravery and communication ability with other people or friends because by using this technique each student gets one or few pieces of the "puzzle". With that piece, students are expected to share, retell the story or discuss certain topic with English language in their group or other group and also can give opinion or response from other students' opinion to fit all the pieces and get meaningful information.

However, the origin version of jigsaw flashcard is complex and is probably more appropriate for experienced students or instructors. It is in line with Clarke (1994) who states that the jigsaw structure is complex and is probably more appropriate for experienced students or instructors. It may be best suited for the end of the semester when the students are comfortable with group work. There are high expectations and responsibilities placed on the students. Teaching the students in the original group can be a demanding experience for students. This can be mitigated if the jigsaw structure is altered so two group members share the same section and then join with another pair of students, if the sections are more open-ended so there is no single right answer, or if students are encouraged to take notes during the focus groups to provide a support when the original groups re-assembles. By implementing modified jigsaw flashcard, it can be more appropriate to the high school students. Thus, it involves students in listening, thinking, reading and writing. At last, it engages the students as active learner.

### **3. Result of the Data Analysis**

#### **Result of Pretest**

The researcher administered the pretest before giving the treatment. The result shows that the highest score of the students in the pretest is 77 and the average scores of the students in the pretest is 67.12. The result of pretest can be seen in the following table:

**Table 1**  
**Frequency Distribution and Descriptive Statistics of Pretest**

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	25	50.00	77.00	67.1200	7.23602
Valid N (listwise)	25				

#### **Result of Posttest**

Posttest was done after giving the treatment to the students. The results of the posttest were got from 25 students as the sample with the same instrument as the pretest. The result shows that the highest score of the students in the posttest is 87 and the average scores of the students in the posttest is 75.52. The result of posttest can be seen in the following table:

**Table 2**  
**Frequency Distribution and Descriptive Statistics of Posttest**

	N	Minimum	Maximum	Mean	Std. Deviation
Posttest	25	67.00	87.00	75.5200	5.86032
Valid N (listwise)	25				

### The difference of Students' Speaking Skill after Being Taught by Using Modified Jigsaw Flashcard

After getting the results of pretest and posttest score, the researcher answered the research questions number 1 by using t-test. The result is: there is difference of students' speaking skill after being taught by using modified jigsaw flashcard. The result can be seen in the following table:

**Table 3**  
**Results of Pretest and Posttest**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	67.1200	25	7.23602	1.44720
	Posttest	75.5200	25	5.86032	1.17206

**Table 4**  
**Results of Paired Samples T-Test**

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Pretest - Posttest	8.40000	5.67157	1.13431	10.74111	6.05889	7.405	24	.000

Based on the table 4 above, the pretest that consists of 25 students, has mean score 67.12 for the pretest and the posttest has mean score 75.52. Table 4. shows that sig (2 tailed) is 0.000. It means that  $\text{sig} < \alpha$  ( $p < 0.05$ ;  $p=0.000$ ). It can be concluded that  $H_0$  is rejected and  $H_1$  is accepted that there is difference of students' speaking skill after being taught by using modified jigsaw flashcard. Based on the data, there is significant improvement between pretest and posttest. Table 4. indicates that students' mean score of post-test is higher than pretest.

### Gain between Pretest and Posttest

After the researcher has found the difference between pretest and posttest of speaking scores, the researcher calculates the gain score between the pretest and posttest. The researcher uses normality of gain formula. The formula is  $g = \frac{\text{Posttest} - \text{Pretest}}{\text{Max Posttest} - \text{Pretest}}$ . The result of gain score in pretest and posttest of speaking achievement is as follows:

**Table 5**  
**Gain Score between Pretest and Posttest of Speaking Skill**

No.	Code Name	Pretest		Average	Posttest		Average	Gain	Criteria
		R1	R2		R1	R2			
1	Student 1	74	72	73	87	86	87	1,00	High
2	Student 2	63	63	63	65	68	67	0,17	Low
3	Student 3	70	70	70	80	80	80	0,59	Middle
4	Student 4	66	68	67	80	80	80	0,65	High
5	Student 5	70	69	70	70	70	70	0,00	Low
6	Student 6	70	70	70	81	79	80	0,59	Middle
7	Student 7	77	77	77	84	82	83	0,60	Middle
8	Student 8	77	77	77	81	79	80	0,30	Middle
9	Student 9	63	62	63	77	77	77	0,58	Middle
10	Student 10	67	66	67	83	83	83	0,80	High
11	Student 11	49	51	50	66	67	67	0,46	Middle
12	Student 12	67	67	67	83	83	83	0,80	High
13	Student 13	60	60	60	70	69	70	0,37	Middle
14	Student 14	71	68	70	71	74	73	0,18	Low
15	Student 15	62	64	63	77	77	77	0,58	Middle
16	Student 16	49	51	50	66	68	67	0,46	Middle
17	Student 17	67	67	67	77	77	77	0,50	Middle
18	Student 18	70	70	70	70	69	70	0,00	Low
19	Student 19	63	63	63	70	70	70	0,29	Low
20	Student 20	77	76	77	79	81	80	0,30	Middle
21	Student 21	72	73	73	77	77	77	0,29	Low
22	Student 22	67	67	67	72	73	73	0,30	Middle
23	Student 23	58	62	60	70	70	70	0,37	Middle
24	Student 24	77	76	77	77	77	77	0,00	Low
25	Student 25	67	67	67	70	70	70	0,15	Low
Mean								0,37	Middle

#### 4. Discussion

##### **Problems in the Implementation of Modified Jigsaw Flashcards in Teaching Speaking**

Modified jigsaw flashcard is one of strategies in teaching writing. It is a good for learning process in writing because modified jigsaw flashcard is focused on peer tutoring and information gaps. It means that the students can express their idea and their ability to solve the problems. Besides, the students are motivated to ask some questions if there is difficulty to their friends who are clever. This technique also increases the participation of the students in teaching learning process.

Ur (1999: 120) says that the characteristics of a successful speaking activity are as follows: 1) Learners talk a lot: As much as possible of the period of time allotted to the activity is in fact occupied by learners talk. This may seem obvious, but often most time is taken up with teacher talk or pauses. 2) Participation is even: Classroom discussion is not dominated by a minority of talkative participants. All get a chance to speak, and contributions are fairly distributed. 3) Motivation is high: Learners are eager to speak because they are interested in the topic and have something new to say about it, or because they want to contribute to achieve a task objective. 4) Language is of an acceptable level: Learners express themselves in utterances that are relevant, easily comprehensible to each other, and of an acceptable level of language accuracy.

Based on the result of interview, the researcher found that some of the students find it hard to understand about the aspect of speaking skill such as vocabulary. Of course, all micro skills like grammar, vocabulary and pronunciation are important. But it is far more difficult to communicate with no vocabulary than with no grammar. It is in line with student 5's statement who said that: "speaking aspect such vocabulary makes me a bit confuse to make a descriptive paragraph".

This condition is supported by Student 23 who said that: "I do not brush up my English vocabulary, so it makes me difficult to master English, beside that I feel difficult in exploring my ideas because of that". Therefore, the limitation of students' vocabulary mastery can be classified to be one of the biggest problems faced by the students in speaking/delivering descriptive monologue.

Richards (2002) states that vocabulary is core component of language proficiency and provides much of the basis for how well learners speak, listen, read, and write. It means that speaking cannot be taught alone, but usually with the integration of the other skill and components. Campillo in hudzaifah (2016) said that vocabulary is obviously a very important element within a language as the overwhelming majority of meaning is carried lexically. We know that learn English not only learn vocabulary but also grammar, pattern or tenses, sentence and others, but we cannot produce very well at all if we do not learn about the vocabulary, we will have minimal words to say and limit understand the meaning if we have conversation in English with other people. That is why vocabulary is very important to learn, especially in speaking skill. Based on the explanation above, there are so many useful function of vocabulary in improving the language skill, such as developing speaking skill.

### **The Differences on Students' Speaking Skill before and after the Implementation of Modified Jigsaw flashcard**

To overcome the problems related to students' low speaking skills, some actions were implemented. The main action was applying the jigsaw technique. The jigsaw technique was chosen because this activity could provide the students with a lot of speaking practice as well as contexts where a certain language functions would be used without hesitant. This activity also helped the students who had difficulty to master the lesson material as a result of asking and interacting with other friends. Furthermore, the students were facilitated to develop their self-confidence and motivation to speak English fluently in comfort and creative atmosphere.

The implementation of the jigsaw technique was combined with other actions, i.e. using interesting modified English material, using various media such as flash card in presenting new language, giving simple the classroom English instructions, giving some feedbacks during or in the end of teaching and learning process, and inviting the students in competition among teams to answer questions in the end of the lesson. The aim of these actions was to improve students'

confidence, comprehension, fluency, pronunciation, vocabulary and grammar. It was also aimed at providing them with adequate language input and opportunities to practice speaking. In addition, it was to encourage students to participate in the speaking activities.

Student's speaking skill after using modified jigsaw flashcard is getting better, the students feel easier to understand and mark some of the confusion on their speaking. The use of the modified jigsaw flashcard in the process of improving the students' speaking skill brings positive response for the students. It can be shown on the use of modified jigsaw flashcard that can improve students' speaking skills. Additionally, by using modified jigsaw flashcard in the teaching and learning process, it also assists teachers in the delivery of the material so it is easier to be understood by students.

Based on the calculation between pretest and posttest, it is known that the mean score for the pretest is 67.12 and the mean score for posttest is 75.52. Table 4. shows that sig (2 tailed) is 0.000. It means that  $\text{sig} < \alpha$  ( $p < 0.05; p = 0.000$ ). It can be concluded that there is difference of students' speaking skill after being taught by using modified jigsaw flashcard and there is significant improvement between pretest and posttest. Table 4. indicates that students' mean score of posttest is higher than those of pretest.

### **How Can the Implementation of Modified Jigsaw Flashcards affect Students' Speaking Skill**

Based on the finding, it could be inferred that the implementation of the jigsaw technique made the students' vocabulary mastery improved. During the practice, the students who got difficulties in vocabulary could learn from the others who knew the words. Competition among teams to memorize vocabulary as many as possible also contributed on their vocabulary mastery progress. Therefore, their vocabulary mastery showed a better improvement than before.

It was found out that the students had difficulties in speaking fluently. The use of the modified jigsaw flashcard technique was helpful in solving the problem. The jigsaw technique provided the students with a lot of practice and discussion. It made the students' fluency also improved. Through the practices and discussion, they were accustomed to the words related to a certain expression or language function. Besides, the process of drilling in presenting language function made them more fluently in speaking. In addition, the students must depend on each other for their information, so they must interact at all stages to accomplish a given task. In other condition, feedback and correction from the teacher kept on controlling their speaking activities.

The implementation of the modified jigsaw flashcard technique made the students' pronunciation was improved. The use of flashcard in both classical and through audio visual media like video in pre-teaching process helped the students to learn how some words pronounced. In addition, there was pronunciation practice after listening to the teacher or watching a video and explaining the expression or language function. The students who got difficulties could learn from the video and the other friends who used the words and expressions well. To help them in pronunciation, more feedback was given during practice.

The use of the modified jigsaw flashcard technique was useful to reduce the students' difficulties in grammar accuracy. They tended to apply incorrect word order or missed part of speech of the sentences. The students who got difficulties could learn from the others. Besides, the student could also learn from the video and feedback from the teacher.

## **D. CONCLUSION AND SUGGESTION**

Based on the data analysis and the results of the interviews, the researcher concludes that the research findings for the tenth grade students of SMA Al Ismailiyun Sukadamai Natar are: 1) there were some problems happen during the implementation of jigsaw technique; time consuming, students' confusion and students' weakness in handling speaking material; 2) the implementation of modified jigsaw flashcards affects students' speaking skill. Hence, students can relate vocabulary words to their own background or experience. Thus, it involves students in thinking, reading and speaking. At last, it engages the students as active learner; 3) the implementation of modified jigsaw flashcards runs well.

Based on the research finding above, it can be concluded that the implementation of modified jigsaw flashcards learning model to promote students' speaking skill. Students' speaking skill after using modified jigsaw flashcards learning model is increased. Based on the table 4.4, the pretest that consists of 25 students, has mean score 67.12 for the pretest and the posttest has mean score 75.52. Table 4. shows that sig (2 tailed) is 0.000. It means that  $\text{sig} < \alpha$  ( $p < 0.05; p = 0.000$ ). It can be concluded that  $H_0$  is rejected and  $H_1$  is accepted that there is difference of students' speaking skill after being taught by using modified jigsaw flashcards and there is significant improvement between pretest and posttest. Table 4. indicates that students' mean score of posttest is higher than pretest.

### **Implication and Suggestion**

Some of the implication and suggestion are addressed to the teachers and further researchers, they are: 1) the strategy used in this research is really effective to teach students speaking skill especially in promoting the aspect of vocabulary. It can be used as an alternative way for teacher to teach learning speaking. It provides clear directions and steps to teach students about the speaking skill especially in promoting the aspect of vocabulary; 2) in implementing the strategy, teachers are suggested to not only give the clear instruction about how to use the strategy but also give the materials which support the use of the strategy. By giving the appropriate materials, students can try to implement the strategy by using those materials; 3) since the use of modified jigsaw flashcards learning model to teach speaking especially in promoting the aspect of vocabulary, it seems that it would be interesting for the future researchers to implement this strategy in different English skills; 4) it is suggested for the further researchers to conduct their research in a senior high school which has students with good ability of English in order to get the best result of the research; 5) in addition, it is also suggested for the next researcher to implement jigsaw flashcards in long term research to see the different effect of modified jigsaw flashcards to students' in other language skills.

## **REFERENCE**

- AESC of Bethel University, (2010). Using Flashcards. Retrieved online on March 10<sup>th</sup> 2018, from: *betheluniversity.edu*
- Aronson, Elliot. (2000). Overview of a Modified Jigsaw Technique for Learning Content Material. Retrieved online on March 10<sup>th</sup> 2018, from: *http://www.jigsaw.org/steps.htm*

- Brown, H.D. (2007). *Teaching by principles: An Interactive Approach to language Pedagogy* (3<sup>rd</sup> Edition). New York: Pearson Education Inc.
- Burkart, G.S. (1998). *Spoken language: What it is and how to teach it*. Washington, DC: Center for Applied Linguistics.
- Clarke, J. (1994). "Pieces of the puzzle: The jigsaw method" In Sharan, S. (Ed.), *Handbook of cooperative learning methods*. Greenwood Press.
- Fraenkel, E Jack & Wallen, E Norman. (1993). *How To Design and Evaluate Research in Education*. Boston: Mc. Graw Hill.
- Hudzaifah, Ayu. (2016). Increasing Vocabularies through Modified Jigsaw and Recitation for Junior High School. *Journal of English Teaching Adi Buana, Vol. 01 No. 01, April 2016. pp. 1-11*.
- Khodareza & Komachali, E. (2012). The Effect of Using Vocabulary Flashcard on Iranian on Iranian Pre-University Students' Vocabulary Knowledge. *Canadian Center of Science and Education Journal, 5 (3): 134-147*.
- Mayer, R.E. & Alexander, P.A.. (2011). *Handbook of Research on Learning and Instruction*. New York: Routledge.
- Nunan, D. (1999). *Second Language Teaching and Learning*. Boston: Heinle & Heinle Publishers.
- Richards, J. C. (2002). Teaching vocabulary. In J. C. Richards, & A. W. Renandya (Eds.), *Methodology in Language Teaching: An anthology of Current practice*. Cambridge: Cambridge University Press.
- Richards, J.C. & Schmidt, R. (2010). *Longman Dictionary of Language Teaching and Applied Linguistics*. Fourth edition. Edinburgh Gate: Pearson Education Limited.
- Saputra, J. B. (2018). An Analysis of Students'speaking Anxiety toward Their Speaking Skill. *Premise: Journal of English Education, 7(1), 111-123*.
- Setiyadi, Bambang, dkk. (2007). *Teaching English Foreign Language 2*, Jakarta: Universitas Terbuka,.
- Turk, Christopher. (1985). *Effective Speaking: Communicating in Speech*. London: Taylor & Francis Group.
- Ur, P., (1996). *A Course in Language Teaching: Practice and Theory*. Cambridge: Cambridge University Press.