

## THE EFFECT OF JIGSAW ON SPEAKING PERFORMANCE OF FIRST GRADE STUDENTS AT SMAN 3 BANDAR LAMPUNG

Daniel Julius Ardianto<sup>1\*</sup> Hery Yufrizal<sup>2</sup> Gede Eka Putrawan<sup>3</sup>

FKIP Universitas Lampung, Jl. Prof. Dr. Soemantri Brojonegoro No.1, Bandar Lampung<sup>1,2,3</sup>

\*e-mail: [danieljuliusardianto715@gmail.com](mailto:danieljuliusardianto715@gmail.com), Telp: +6282281036934

**Abstrak:** Penelitian ini bertujuan untuk mengetahui perbedaan signifikan pada kemampuan berbicara siswa setelah penerapan teknik *Jigsaw*. Penelitian ini dilakukan di SMAN 3 Bandar Lampung 33 siswa/i di kelas X-IPA-4 berlaku sebagai sampel. Data dikumpulkan menggunakan test berbicara menggunakan skoring rubric dan kuisioner. Selanjutnya data dianalisis menggunakan Paired Sample T-Test di SPSS versi 20. Hasilnya menunjukkan bahwa ada perbedaan yang signifikan pada kemampuan berbicara siswa setelah penerapan teknik *Jigsaw* dengan level signifikansi pada .001 ( $< .05$ ). Teknik pembelajaran ini membuat siswa terbiasa dengan bahasa target yang dipelajari dan menyediakan paparan terhadap bahasa yang dapat membantu siswa untuk mengurangi keraguan dan keengganan dalam mengutarakan kata-kata atau kalimat saat berbicara dalam Bahasa Inggris. Disarankan kepada peneliti yang akan datang untuk menginvestigasi keefektifan dari teknik *jigsaw* dalam mengajarkan kemampuan atau aspek kebahasaan lain di jenjang pendidikan yang berbeda.

**Abstract:** This research was aimed at investigating the significant difference of students' speaking performance after being taught by using *Jigsaw*. This research was conducted at SMAN 3 Bandar Lampung in which the participants were 33 students of First Grade. The data were collected by using speaking test using. The data collected were analyzed through Paired Sample T-Test in SPSS version 20. The result showed that there is a significant difference of students' speaking performance after the implementation of *jigsaw*, with a significance level at .001 ( $p < .05$ ). This technique makes students get used to the target language being learnt and provides more language exposure that can help students to lessen their hesitance and reluctance in saying or uttering words or sentences in performing speaking in English. It is suggested for further researchers to investigate the effectiveness of *jigsaw* in teaching other language skills or aspects in different level of education.

**Keyword:** *Speaking Performance, Jigsaw, Attitude.*

## INTRODUCTION

Speaking which is categorized as a productive skill is the most important skill compared to other skills (Spartt, 2015). It is used in the most daily communication to convey one's ideas, information, and maintain social relationship by communicating with others (Rivers, 1981). It is used to express one's feeling, information, and service (Brown and Yule, 1989). Therefore it can be stated that speaking plays important role in communication.

Speaking is one of language skills learnt by either junior high school, senior high school or university students. However, senior high school students are reported having difficulties in performing speaking activity (Sari, 2015). Speaking tends to be more complicated for English as Foreign Learner (EFL) students (Jasim, 2017). Performing speaking activities make them feel anxious because they do not use English as much as that they usually do in their mother language, they may be reluctant to perform speaking in target language because they are afraid of making mistakes (Nascente, 2001).

Based on the pre-observation, problems occurred in SMAN 3 Bandar Lampung related to speaking skills. Commonly, the problems come from teacher and students themselves. For teacher's problem, it might occur for the current situation. For example, 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. Next problem comes from the students. For instance, the students are not maximum and active in the practice

of speaking skill in the class. They are mostly passive and difficult to involve in conversation or discussion of speaking lesson in English.

Nevertheless, according to Kurikulum 2013, senior high school student should be able to produce or tell descriptive orally;

“Compose produce descriptive oral and written texts, short and simple, related to tourist attractions and famous historic buildings, taking into account social functions, text structures, and linguistic elements, correctly and in context.”

To overcome those problems, some previous research has been done and proven that jigsaw could improve students speaking skill. Gaol and Reni (2015) stated that Jigsaw motivates and encourages them to deliver their arguments and ideas and can be applied to improve students' speaking ability. A research done by Maghfira and Marhum (2016) found that Jigsaw makes the students' were actively participating and help each other. They were also enthusiastic to express their opinions. A research done by Utari (2014) stated that Jigsaw technique did not make the students bored. It could increase their involvement in the speaking teaching and learning process, and increase the students' enthusiasm.

The researcher believes that this study was important to be conducted to find out the difference of students speaking performance after the implementation of jigsaw technique.

Therefore, this study was aimed at investigating the significant difference of students' speaking performance after the implementation of jigsaw.

## LITERATURE REVIEW

### Concept of Speaking

Speaking skill is an important aspect of language, which L2 learners should study and acquire so that the learners can communicate one to another (Welty). The importance relies on two aspects. First, our personality, our self-image, our knowledge of the world and our ability to reason and express our thoughts are reflected to in our spoken performance in a foreign language where L2 learner's goals are being able to speak to friends, colleagues, visitors, in L2 language. Second, the linkage between students' classroom participation and their academic achievement is undeniable.

Furthermore, speaking is encoding process whereby, we communicate our ideas, thought and feeling through one or other forms of language (Harris, 1974). In addition, we can produce spoken message to someone. The message here is our idea, thoughts, or feeling, which we want to share. In this case, the speaker needs a listener in order to communicate.

Speaking is not simply expressing something orally. However, the students need to acquire some speaking aspects to have good speaking skill. As proposed by Brown (2001), those aspects are pronunciation, fluency, vocabulary, grammar and comprehension. Pronunciation refers to the traditional or customary utterance of words. From that statement can be concluded that pronunciation is the way for students to produce the utterance words clearly when they are speaking (Kline, 2001). The grammar of a language is the description

of the ways in which words can change their forms and can be combined into sentences in that language (Harmer, 2007). Thus, from the statements above can be concluded that the function of grammar is to arrange the correct meaning of sentences based on the context; in addition, it is used to avoid misunderstanding in each communicator.

Vocabulary means the appropriate diction or the most important thing in a language especially in speaking; furthermore, knowing many vocabularies we will be easier to express our ideas, feeling and thoughts both in oral or written form. In spoken language, the vocabulary tends to be familiar and everyday (Turk, 2003). It means that in spoken language or speaking, the vocabulary used must be very familiar and it is used in everyday conversation in order to understand the spoken discourse.

Fluency is defined as the ability to speak communicatively, fluently and accurately. Fluency usually refers to express oral language freely without interruption (Turk, 2003)

Comprehension refers to the fact that participants fully understand the nature of the research project, even when procedures are complicated and entail risks (Brown, 2001)

Therefore, in speaking can be concluded that the comprehension refers to the speakers' understanding about what are they saying to the listeners in order avoid misunderstanding information; in addition, its function is to make the listeners easily to catch the information from the speaking.

### **Concept of Jigsaw**

The jigsaw teaching technique was invented and named in 1971 in Austin, Texas by a graduate professor named Elliot Aronson. Recent desegregation had forced a racial mix on the students of Austin, and many teachers were unable to cope with the turmoil and hostility of the situation (Aronson et al, 2015). Jigsaw is one of the cooperative learning techniques. In cooperative learning, students learn cooperation. It was proposed by Vigotsky that all learning is social and occurs within a social framework whether in a family environment with friends, at work or elsewhere, we learn most naturally in social situations. Jigsaw techniques are a special form of information gap in which each member of a group is given some specific information and the goal is to pool all information to achieve some objectives (Brown and Yule, 1983). The students may enjoy the technique and almost always find it challenging.

Jacob and Hall (2002) states that the technique of Jigsaw combines the activities of the four language skills, those are reading, writing, speaking, and listening. The students work together in a cooperative situation and they have many chances to analyze the information. It can also improve the ability to communicate with others.

Jigsaw is usually used in a small group instruction. Students of a normal sized class are divided into competency groups of four to six students, each of which is given a list of subtopics to research. Individual members of each group then break off to work with the „experts“ from other groups, researching a part of

the material being studied, after which they return to their starting body in the role of instructor for their subcategory.

### **METHODOLOGY**

This research adopted quantitative approach with one group pre-test post-test design (Setiyadi, 2018). The population of this research was first grade students of Senior High School 3 Bandar Lampung. This school belongs to National school that implement Kurikulum 2013 by Indonesian Ministry of Education. 33 students of class X-Science-4 were chosen by implementing random sampling. The data were collected by using speaking test. The data were analyzed through Paired Sample T-Test analysis in SPSS version 20 to find out the significant difference of students' speaking performance, the researcher compared the score of students' speaking pre-test and post-test.

### **RESULT AND DISCUSSION**

#### **Result**

Table 1 shows the mean difference of students speaking performance before and after the implementation of jigsaw technique. Paired Sample T-Test was undertaken to get this data.

Table 1. The difference of students' pre and post test score in Paired Samples T-Test

		Paired Differences	T	Df	Sig. (2-tailed)
		Mean			
Pair 1	Post-test - Pre-test	6.4091	15.241	32	.001

Table 1 provides evidence that the mean difference of students' speaking performance score in post and pre-test is positive. It indicates that

after the implementation of Jigsaw, students' speaking performance is improved.

Table 2. The difference of speaking aspects' score before and after the implementation of jigsaw.

	Pre-Test	Post Test	Score Improvement	Improvement in Percentage
Grammar	1.74242	3.12121	1.37879	28%
Fluency	1.54546	2.42424	0.87879	18%
Pronunciation	2.09091	3.60606	1.51515	30%
Vocabulary	2.10606	3.69697	1.59091	32%
Comprehension	1.75758	2.81818	1.06061	21%
Speaking Performance	9.24243	15.6667	6.42424	26%

Table 2 suggests that the most improved aspect is vocabulary, 32% followed by pronunciation at 30% and grammar at 28%. It is reported that comprehension improved 21% while the least improved aspect is fluency at 18%. Overall, students' speaking performance is improved 26% after the implementation of Jigsaw.

### Discussion

In order to investigate whether there is a significant difference of students' speaking performance after the implementation of jigsaw or not, it is done through testing the p value. Table 1 shows that p value is lower than .05 ( $.001 < .05$ ). It can be concluded that there is a significant difference of students' speaking performance after the implementation of jigsaw. The data also show that the mean difference of students' score after the implementation of jigsaw is

6.4091 out of 25. It indicates that jigsaw technique helps students to improve their speaking performance significantly.

This technique makes students more active participants in the teaching and learning process. They have the responsibility to teach their group members. This interaction makes them exchange information effectively about the topic being discussed. It is in line with Dyna's finding (2012) stated that some students who were previously reluctant and hesitate to speak in English showed more eagerness to practice speaking in English. The model given by teacher as the facilitator makes the students practice to speak in English more. So when one student speaks, the others will listen and vice-versa. This exposure allows the students to improve their acquisition of English. Target language exposure provides

environment to the students to practice their English more. Zoulbi (2018) also found that through exposure to the target language, the learner can comprehend the target language. Ismail (1991) also addressed the same view when he stated the higher degree of contact to the target language students received, the more competent the students to the language.

In the implementation of jigsaw, task specialization also takes important role in improving students' speaking performance. Each student in a jigsaw is given different material to be mastered. The combination of materials in a jigsaw group can enrich students' vocabulary and pronunciation mastery. Students learn the meaning and how to pronounce new vocabularies from different materials. When the students worked in expert group, they focused on one material or topic that they have to master the topic by knowing the meaning of new vocabularies and how to pronounce them. In the jigsaw group, students exchanged new vocabularies to the others. As mentioned by Khan (2018) a rich vocabulary makes the skill of speaking easy to perform as they know how to pronounce it.

Jigsaw technique also improves grammar quite significantly, the improvement is 28%. Students' have responsibility to teach their group mates. Despite the capability of the members are different one to each other, each jigsaw group has one leader that was chosen by their score on previous test before the implementation of jigsaw. So, it is confirmed that each jigsaw group has one student that has good capability in grammar because jigsaw stimulated peer-correction. When one mem-

ber teaches or presents the topic to the group, peer-correction can be happened. This step is to confirm that the peer-correction was done by the students themselves. Students felt okay when they got corrected by their peer instead of the teacher. Ganji (2009) stated that Peer-correction is effective to improve students' grammar. Students tend to feel anxious and fear as they got corrected by the teacher (Kralova, 2015). Thus, the implementation of jigsaw could stimulate peer-correction when one member making mistake in grammar when they present the topic.

Teacher role as facilitator also takes important part in improving students' speaking performance especially in fluency and comprehension aspects. As explained by Johnson et al. (1999) the teacher should create a well-structured learning environment, setting goals, planning and structuring tasks, establishing the physical arrangement of the classroom, assigning students to groups roles, and selecting materials and time. Before implementing jigsaw technique, the teacher created "teaching and learning model" to be implemented in their jigsaw group. This model created to prevent that the jigsaw group communicate more in students' L1 instead of English and to construct the descriptive text based on its' text organization since learning objective is to create condition for the students to be able to produce oral descriptive text (Kurikulum 2013). When the students implement the model given by the teacher it will stimulate students to speak in English, by doing so they will got repetition and substitution drill in acquiring speaking. Members asked ques-

tion from the model made by the teacher to one student while he was presenting the topic. This step involved the participation and interaction of the students. As much as they listened and spoke in English it could increase their fluency and comprehension. According to Skinner (1957) that acquiring and learning a language is a habitual formation. Rao (2018) stated that habits would be formed and strengthened by repetition, imitation and substitution. Thus, it will decrease their hesitation in saying or uttering sentence because they were get used to to the topic they were talking about.

## **CONCLUSION AND SUGGESTION**

### **Conclusion**

Jigsaw technique is proved to be able to help students speaking performance by increasing students' participation in classroom activities. Jigsaw also helps students to exchange various topics being discussed that make students to learn new vocabularies. This technique also makes students get used to the target language being learnt and provides more language exposure that can help students to lessen their hesitance and reluctance in saying or uttering words or sentences in performing speaking. Based on the research of result and discussion, then it can be concluded that there is a significant difference of students' speaking performance after the implementation of Jigsaw.

### **Suggestion**

Based on the result and discussion and conclusion here are some recommendation from the researcher; since a teacher acts as facilitator in

the implementation of jigsaw, model of interaction in jigsaw should be given before it is implemented. A teacher should be aware of choosing the leader of each jigsaw group in order to make the peer-correction goes right. Teacher should provide more target language environment to extend students' exposure to it. Since this research is intended to find out the difference of students; speaking performance after the implementation of jigsaw, future researchers are expected to find out the use of jigsaw in teaching other language skills or aspects in different level of education. It is also suggested to investigate students' respond or perception after being taught using jigsaw technique.

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