

**THE INFLUENCE OF JIGSAW TECHNIQUE TOWARD
STUDENTS' SPEAKING ABILITY OF THE SECOND
YEAR AT MADRASAH ALIYAH
DARUL ULUM TANDUN**

A Thesis
Submitted to Fulfill One of Requirements
for Bachelor Degree in English Education
(S.Pd.)



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PEKANBARU
1434 H/2013 M**

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Praise belongs to Allah Almighty, the lord of universe. By his guidance and his blessing, the researcher has completed this academic requirement. Then, the researcher also conveys peace be upon him to Prophet Muhammad.

This thesis is researched and intended to be submitted in partial fulfillment of the requirements for the bachelor degree in English Education Department of Tarbiyah and Teacher Training Faculty of State Islamic University Sultan Syarif Kasim Riau. The title of the thesis is “*The Influence Of Jigsaw Technique Toward Student’s Speaking Ability Of The Second Year At Madrasah Aliyah Darul Ulum Tandun*”. In this occasion, the researcher also expresses his sincere thanks and deep gratitude to:

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Pekanbaru, June 2012
The Writer,

MAILENY ASTRIANI

ABSTRACT

Maileny Astriani (2012): The Influence of Jigsaw Technique toward Students' Speaking Ability of the Second Year at Madrasah Aliyah Darul Ulum Tandun

The problem of this research is the students have difficulties to communicate in English. This purpose of this research is to find significant influence of jigsaw technique toward speaking ability of the second year students at Madrasah Aliyah Darul Ulum Tandun. The method of this research is experimental research. The subject of this research is the second year students of Madrasah Aliyah Darul Ulum Tandun. They consist of three classes (90 students). The writer takes class XIB (30 students) and class XIC (30 students) as the sample of the research. The way in choosing this sample is cluster technique. The instrument of this research is test. It is used to get data about the students' speaking ability. Whereas, to analyze the data, the writer uses t-test.

The result of this research shows that the score of t-test is higher than t-table. The use of Jigsaw technique can improve the speaking ability and influence many aspects such as the students' motivation in learning speaking, the students have the opportunity to practice speaking by themselves, the students are able to communicate with their friend in pair, the student can contribute meaningfully to a discussion and the students are able to develop teamwork and cooperative working skills.

In conclusion, it can be known that there is significant influence of jigsaw technique toward students' speaking ability of the Second Year at Madrasah Aliyah Darul Ulum Tandun.

ABSTRAK

Maileny Astriani (2012): Pengaruh Teknik Jigsaw terhadap Kemampuan Berbicara Siswa Kelas Dua Madrasah Aliyah Darul Ulum Tandun

Masalah penelitian ini adalah siswa mengalami kesulitan untuk berkomunikasi dalam bahasa Inggris. Penelitian ini dilakukan untuk menemukan pengaruh signifikan dari teknik jigsaw terhadap kemampuan berbicara siswa kelas dua Madrasah Aliyah Darul Ulum Tandun. Metode penelitian ini adalah penelitian eksperimen. Subjek penelitian ini adalah siswa kelas dua Madrasah Aliyah Darul Ulum Tandun. Mereka terdiri dari tiga kelas (90 siswa). Penulis mengambil kelas XIB (30 siswa) dan kelas XIC (30 siswa) sebagai sampel penelitian. Cara dalam mengambil sampel ini adalah teknik cluster. Instrumen penelitian ini adalah tes. Hal ini digunakan untuk mendapatkan data tentang kemampuan berbicara siswa. Sedangkan untuk menganalisis data, penulis menggunakan uji-t.

Hasil penelitian ini menunjukkan bahwa nilai t-tes lebih tinggi dari nilai t-tabel. Penggunaan teknik jigsaw dapat meningkatkan kemampuan berbicara siswa dan mempengaruhi banyak aspek seperti siswa termotivasi dalam belajar berbicara, siswa berkesempatan untuk latihan berbicara sendiri, siswa dapat berkomunikasi dengan teman sebangku, siswa dapat berkontribusi dalam diskusi dan siswa dapat mengembangkan kemampuan kerja tim dan kerjasama.

Kesimpulannya dapat diketahui bahwa terdapat pengaruh yang signifikan dari teknik jigsaw terhadap kemampuan berbicara siswa kelas dua Madrasah Aliyah Darul Ulum Tandun.

ملخص

مايلاني أسترياتي (٢٠١٢): تأثير تقنية جيغساو إلى قدرة الطلاب على التكلم لطلاب الصف الثاني بالمدرسة العالية دار الحكمة باكنبارو.

هذا البحث هو بحث التجربة. المشكلة في هذا البحث هي صعوبة الطلاب على الاتصال في اللغة الإنجليزية. انعقد هذا البحث لمعرفة تأثير تقنية جيغساو إلى قدرة الطلاب على التكلم لطلاب الصف الثاني بالمدرسة العالية دار الحكمة باكنبارو. الموضوع في هذا البحث طلاب الصف الثاني بالمدرسة العالية دار الحكمة. الموضوع في هذا البحث طلاب الصف الثاني بقدر ٩٠ طالبا. ثم أخذت الباحثة طلاب الصف الحادي عشر الباء (٣٠ طالبا) و طلاب الصف الحادي عشر الجاء (٣٠ طالبا) لعينات هذا البحث بتقنية عنقودية. تتكون الأدوات في هذا البحث من الاختبار لنيل البيانات عن قدرة الطلاب على التكلم ثم تحليل البيانات بطريقة الاختبار - ت.

بناء على كشف الباحثة، أن نتيجة قدرة الطلاب على التكلم في الاختبار القبلي في فصل التجربة ١٣٦٤ و معدل النتيجة نحو ٤٥،٤٧ وهي على المستوى فشل. ثم في الاختبار البعدي ١٨٥٠ و معدل النتيجة نحو ٦١،٦٧ وهي على المستوى مقبول. ثم نتائج الطلاب في الاختبار القبلي لفصل الضابط ١٣٧٢ و معدل النتيجة ٤٥،٧٥ وهي على المستوى فشل ثم في الاختبار البعدي ١٤٧٨ و معدل النتيجة ٤٩،٢٧ وهي على المستوى فشل.

بعد تحليل البيانات استنتجت الباحثة أن نتيجة ت-الحساب أكبر من النتيجة ت-الجدول (٨،٩٦٤ < ١،٦٧١). تدل هذه البيانات أن الفرضية البديلة مقبولة و الفرضية الصفرية مرفوضة. و الاستنتاج أن هناك تأثير تقنية جيغساو إلى قدرة الطلاب على التكلم لطلاب الصف الثاني بالمدرسة العالية دار الحكمة باكنبارو.

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CHAPTER I

INTRODUCTION

A. Background of the Problem

Speaking is a tool to communicate in oral language. This is a kind of activities that needs support with mastering other language skills. Speaking is the process of building and sharing meaning with the use of verbal and non-verbal symbols, in variety of contexts.¹

Speaking is the process of building and sharing meaning by verbal and non-verbal symbols. Speaking is a crucial part of foreign language learning and teaching. However, today's world requires the goal of teaching speaking should improve students' communicative skills because students can express themselves and learn how to use a language.

Nowadays, many teachers agree that students should learn to speak the foreign language by interacting to others. For this case, students should master several speaking components', such as comprehension, pronunciation, grammar, vocabulary, and fluency. In brief, English teacher should be creative in developing their teaching and learning process to create good atmosphere, improving the students speaking skill, giving attention to the speaking components', and making the English lesson more exiting.

English speaking ability is very important to be able to participate in the wider world of work. The speaking skill is measured in terms of the ability to

¹Chaney, *Speaking Skill*, retrieved from: (<http://edu/homepage/hayriyek>, on March 10th, 2011).

carry out a conversation in the language. This reality makes teachers and parents think that their students and children should master speaking ability. Based on the reasons above, in recent years, English language teaching has focused on teach the English language rather than teach about the English language. The emphasis is not only on linguistic competence of the language learners but also on the development of their communicative ability. In order to develop the learners' communicative ability, the teacher needs to create a scenario to teach the target language in a vibrant, active and interesting manner.

All students who are learning English should master speaking ability but not all students get success in speaking ability. One of them is the second year of Madrasah Aliyah Darul Ulum Tandun. Based on the writer's interview to the students of Madrasah Aliyah Darul Ulum Tandun and supported by English teacher's statement, they inform that the school uses KTSP (Educational Unit Level Curriculum). In the curriculum is stated that there is base competency of speaking skill. In the base competency is stated that the students should be able to express the meaning in monolog texts by using various oral language accurately, fluently and receiving in daily life context in form: report, narrative, and analytical exposition.²

to implement the curriculum, the teacher uses dialogue. By using this strategy, the students are hoped to be able to accept basic competency of speaking; laying open the meaning of transactional and short interpersonal conversation to interact with environment. This strategy makes the students only

²The Curriculum of Madrasah Aliyah Darul Ulum Tandun, 2011/2012 School Year

do the conversation about themselves but if the teacher tries to make a conversation based on the lesson, some of the students cannot show their ideas or opinions. They have a problem to use new vocabularies in conversation. These problems influence the students in receiving English KKM that has been specified, that is 70.

Furthermore, the second year students of Madrasah Aliyah Darul Ulum Tandun also cannot use English in communicating yet, even in the simple form. The students' problems in speaking also can be seen from the symptoms below:

1. Some of the students are not able to express love and sadness in oral language accurately, and fluently
2. Some of the students are not able to express anger and annoyance in oral language accurately, and fluently
3. Some of the students are not able to express opinion and satisfaction or dissatisfaction in oral language accurately, and fluently yet.
4. Some of the students are not able to present spoken in hortatory exposition.
5. Some of the students are not able to ask for and give advice in oral language accurately, and fluently yet.

If these problems are not solved, they make the students unable to get good value in learning English. Because of these facts, the researcher tries to overcome these problems by using jigsaw technique. Jigsaw is one of cooperative learning techniques that reduces racial conflict among school children, promotes better learning, improves student motivation, and increases enjoyment of the

learning experience. It is used to develop the skills and expertise needed to participate effectively in group activities. It focuses on listening, speaking, cooperation, reflection, and problem-solving skills. Especially in speaking, it will be responsible for taking the students' knowledge gained from one group and repeating it to new listeners in their original groups.³

Based on the explanation above, the jigsaw technique places great emphasis on cooperation and shared responsibility within groups. The success of each group depends on the participation of each individual in completing their task. This means the jigsaw technique increases the ability of each student in the teaching and learning process especially in speaking effectively.

Finally, the writer is interested in carrying out a research entitled: "The Influence of Jigsaw Technique toward Students' Speaking Ability of the Second Year at Madrasah Aliyah Darul Ulum Tandun".

B. Definition of the Key Terms

In order to make clear about this research, the researcher will narrate some definitions of the key terms. They are as follows:

1. Jigsaw technique means a cooperative learning technique that reduces racial conflict among schoolchildren, promotes better learning, improves student motivation, and increases enjoyment of the learning experience.⁴ In this research, jigsaw technique means the activities that

³Aronson, Elliot, *Jigsaw Classroom*, retrieved from: (<http://www.jigsaw.org/>on April 20th, 2011)

⁴Aronson, Elliot, *Op. Cit.*,

will be used by the researcher to increase the students' speaking ability of the second year at Madrasah Aliyah Darul Ulum Tandun with build cooperation and shared responsibility within students' groups.

2. Speaking comes from word "speak" it means to talk somebody else about something to have a conversation with somebody.⁵ In this research, speaking means the students' ability of the second year at Madrasah Aliyah Darul Ulum Tandun in expressing love, sadness, anger, annoyance, opinion, satisfaction or dissatisfaction, present spoken in hortatory exposition, ask for and give advice.

C. Problems

1. Identification of the Problem

From the background of the problem above, it can be identified some problems dealing with the second year students of the second year at Madrasah Aliyah Darul Ulum Tandun. The identification of the problems is as follows:

- a. Why are some of the students unable to express love and sadness in oral language accurately, and fluently?
- b. Why are only few of the students able to express anger and annoyance in oral language accurately, and fluently?
- c. Why are some of the students unable to express opinion and satisfaction or dissatisfaction in oral language accurately, and fluently yet?

⁵Hornby, AS, *Oxford Advanced Learner's Dictionary (Sixth Edition)*, (Oxford: Oxford University Press, 2000), p. 20.

- d. Why are some of the students unable to present spoken in hortatory exposition?
- e. Why are some of the students unable to ask for and give advice in oral language accurately, and fluently yet?

2. Limitation of the Problem

In this research, it is necessary to limit the problems. The problem is focused on the influence of jigsaw technique toward students' speaking ability of the second year at Madrasah Aliyah Darul Ulum Tandun in the aspects of expressing love, sadness, anger, opinion, satisfaction and dissatisfaction.

3. Formulation of the Problem

The problem of this research can be formulated in the following questions:

- a. How is the speaking ability of the second year students at Madrasah Aliyah Darul Ulum Tandun?
- b. Is there any significant influence of jigsaw technique toward speaking ability of the second year students at Madrasah Aliyah Darul Ulum Tandun?

D. Reasons for Choosing the Title

The writer is interested in carrying out this research because of some reasons as follows:

- 1. The topic is relevant to the writer as one of the students of the English Education Department.

2. The topic has never been investigated yet by other students of English Department of UIN SUSKA Riau
3. The topic is very important to be discussed because speaking ability is very crucial in learning English.
4. To know the influence of jigsaw technique to increase students' speaking ability.

E. Objective and Significance of the Research

1. The Objective of the Research

- a. To find the speaking ability of the second year students at Madrasah Aliyah Darul Ulum Tandun.
- b. To find significant influence of jigsaw technique toward speaking ability of the second year students at Madrasah Aliyah Darul Ulum Tandun.

2. The Significance of The Research

By doing the research, the writer hopes that it can:

- a. To enlarge writers' knowledge about the real teaching process
- b. To fulfil one of the requirements of S.1 degree of English education department of education and teachers and training faculty of UIN SUSKA Riau
- c. To give information to the teacher about jigsaw technique in teaching speaking.

CHAPTER II

THEORETICAL FRAMEWORK

A. Jigsaw Technique

1. The Concept of Jigsaw Technique

The jigsaw technique is a cooperative learning that reduces racial conflict among school children, promotes better learning, improves student motivation, and increases enjoyment of the learning experience. The jigsaw technique was first developed in the early 1970s by Elliot Aronson and his students at the University of Texas and the University of California.¹

The Jigsaw technique is an efficient way to learn the course material in a cooperative learning style. The jigsaw process encourages listening, engagement, and empathy by giving each member of the group an essential part to play in the academic technique. 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.²

Jigsaw technique is a very useful tool for trying to help students' integrated knowledge and understanding from various sources and experts. The basic idea is very simple: students are divided into groups that all have their own

¹Aronson, Elliot, *Jigsaw Classroom*, retrieved from: (<http://www.jigsaw.org> on April 20th, 2011).

²Susan, *Version of Jigsaw*, retrieved from: (<http://www.public.asu.edu/~ledlow/sledlow/jigsaw.htm> on April 2010).

research topic to study. After research, each topic group is split in such a manner that new groups have a single member from each of the old topic groups. After the new groups have been assembled each topic expert is decomposable for integrating the knowledge of his/her topic specific knowledge into the understanding of the new group he/she is in.³

Jigsaw technique is more elaborate information gap technique that can be done with several partners. In a jigsaw technique, each partner has one or a few pieces of the "puzzle," and the partners must cooperate to fit all the pieces into a whole picture. The puzzle piece may take one of several forms. It may be one panel from a comic strip or one photo from a set that tells a story.⁴

Based on the explanation above, the Jigsaw technique places great emphasis on cooperation and shared responsibility within groups. The success of each group depends on the participation of each individual in completing their task. This means the Jigsaw technique effectively increases the involvement of each student in the technique.

In conclusion, jigsaw is a grouping technique in which the members of the class are organized into "jigsaw" groups. The students are then reorganized into "expert" groups containing one member from each jigsaw group. The members of the expert group work together to learn the material or solve the problem, then return to their "jigsaw" groups to share their learning.

³Spencer, Kagan, *Cooperative Learning*, retrieved from: (http://mlab.taik.fi/polut/Yhteisollinen/tyokalu_jigsaw.html on May 2010).

⁴Kalayo Hasibuan and M. Fauzan Ansyari, *Teaching English as a Foreign Language (TEFL)*, (Riau: UIN SUSKA Riau, 2007), p. 108.

2. The Advantages of Jigsaw Technique

The benefit of jigsaw technique can be seen that first and foremost, it is a remarkably efficient way to learn the material. However, even more important, the jigsaw process encourages speaking, listening, engagement, and empathy by giving each member of the group an essential part to play in the academic technique. 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.⁵

In addition, the benefits of using jigsaw are as follows:⁶

- a. Students have the opportunity to teach themselves, instead of having material presented to them. The technique fosters depth of understanding.
- b. Each student has practice in self-teaching, which is the most valuable of all the skills we can help them learn.
- c. Students have practice in peer teaching, which requires that they understand the material at a deeper level than students typically do when simply asked to produce on an exam.
- d. Students "talk geology" and become more fluent in use of geological terminology.

⁵Slavin, Robert E, *Cooperative Learning Teori, Riset dan Praktik*, (Bandung: Nusa Media, 2009), p. 237.

⁶Barbara, Tewksbury, *The Jigsaw Technique*, retrieved from: (<http://serc.carleton.edu/NAGTWorkshops/coursedesign/tutorial/jigsaw.html> on June 2010).

- e. Each student has a chance to contribute meaningfully to a discussion, something that is difficult to achieve in large-group discussion. Each student develops an expertise and has something important to contribute.
- f. Asking each group to discuss a follow-up question after individual presentations fosters real discussion.

In addition, the advantages of jigsaw are:⁷

- a. It is an efficient way to learn the material.
- b. Builds a depth of knowledge
- c. Discloses a student's own understanding and resolves misunderstanding
- d. Builds on conceptual understanding
- e. Develops teamwork and cooperative working skills.

In conclusion, there are many benefits of using jigsaw technique in teaching and learning process especially in learning speaking. It gives students chance to learn the material given by their selve. It contributes meaningfully to a discussion. It gives each student develops an expertise and has something important to contribute. It also give students opportunity to develop teamwork and cooperateive working skills.

⁷Broward, *Jigsaw*, retrieved from: (<http://rshackelford.iweb.bsu.edu/ITEDU691/Jigsaw.pdf> on August 2011).

3. Procedure of Jigsaw Technique

Jigsaw technique can be done in groups. Every member of groups has duty to learn certain material. After that the represents of the group meet with the others represents to discuss the material. In this process the students are ordered to expose their speaking. It means that jigsaw technique order the students to share their ideas or opinion through speaking.⁸

In addition, the following list of jigsaw steps explains the process in more detail:⁹

- a. Divide up the students into teams of about five members.
- b. Appoint one person from each group as the leader.
- c. Divide the lesson into segments to match the number of people in each group.
- d. Assign one member of each group to learn each lesson segment.
- e. Give students time to work on step 4.
- f. Gather students into 'Expert groups,' which are the segmented mini groups. Give them time to discuss their findings of step 4.
- g. Bring the students back into their main groups.
- h. Have each student present his or her findings to the main group.
- i. Move from group to group as a facilitator wherever needed.
- j. Quiz or otherwise test the material covered to determine retention.

⁸Isjoni, *Cooperative Learning Efektivitas Pembelajaran Kelompok*, (Bandung: Alfabeta, 2010), p. 55.

⁹ Aronson, Elliot, *Op. Cit.*,

In addition, the steps of jigsaw technique are as follows:¹⁰

- a. Choose one of the learning materials and then divided it into some segments
- b. Divide the students into some groups base on the segments
- c. Every group is asked to read and understand the material
- d. Every group send the member of group to the others to explain the material that they have learned
- e. Bring the students back into their groups
- f. Ask some questions to the students to know their understanding about the material.

From the explanations above, the writer combines the steps of jigsaw technique in teaching and learning process s follows:

- a. Teacher divides the students into five groups and every group consists of six students
- b. Teacher asks one student in every group as the group leader
- c. Teacher divides the material/lesson into five segments/sub topics (one for each member)
- d. Teacher assigns the students one segment to be learned
- e. Teacher gives students time to learn their segment at least twice to become familiar with it

¹⁰Hartono, *et al.*, *Paikem Pembelajaran Aktif, Inovatif, Kreatif, Efektif dan Menyenangkan*, (Jogjakarta: Zanafa Publishing, 2009), p. 98-99.

- f. Teacher asks the students to present his or her segment to the others groups. Other members are encouraged to ask question for clarification. Then teacher asks the students come back to their jigsaw group.
- g. The teacher observes the process. Intervene if any group is having trouble such as a member being dominating or disruptive.
- h. Teacher gives a quiz at the end to make students realize that the sessions are not just for fun and games, but that they really count.

B. Speaking Ability

1. The Nature of Speaking Ability

Speaking skill is the process of building and sharing meaning by verbal and non-verbal symbols. Speaking ability is a crucial part of foreign language learning and teaching. However, today's world requires the goal of teaching speaking ability should improve students' communicative skills because students can express themselves and learn how to use a language.

Speaking can perform in helping develop communicative skill as follows:¹¹

- a. It opens a rich stimulus of communicative interaction, namely the varied experience, interest and opinion of the learners.
- b. It thus provides a context for wide range of communicative function domain of meaning learners must practice the skill required for

¹¹Littlewood, W, *Communicative Language Teaching*, (Cambridge University Press, 1981), p. 4.

managing longer session of social interaction such as introducing a new topic, turn-taking or sustaining through difficult periods.

- c. It provides learners with opportunities to express to their own experiences through the foreign language. It also gives them the valuable experience in using the language as means of handling their own social relationship.

Speaking skill is a tool to communicate naturally between society to express opinion and as a social behaviour form. Speaking skill also is ability to arrange sentences because communications happened by using sentences to present difference of various behaviours from different society.¹²

The success of speaking learning is irrefutable with the response of student to the language, where they will be more successful than the others. The factors that will probably influence the success of learners are stated as follows:¹³

- a. They have a positive attitude about the language they want to learn and about the speakers of that language.
- b. They have a strong personal motivation to learn the language.
- c. They are confident that they will be successful learners.
- d. They are prepared to risk making mistakes and they learn from their mistakes that they make.
- e. They organize their own practice of language.

Based on the explanations, speaking skill is dialogue because speaking ability involves two or more speakers and can be subdivided into those exchanges

¹²Novia, T, *Technique to Improve Students' Ability in Speaking*, (Padang: UNP Padang, Thesis, 2002).

¹³ Edge J, *Essential of English Language Teaching*, (Longman Group-Uk, 1993), p. 3.

that promote social relationships (interpersonal) and those for which the purpose is to convey propositional or factual information (transactional).

2. The Components of Speaking Skill

The languages learners need to recognize that speaking skill involve three are of knowledge.¹⁴

- a. Mechanics (pronunciation, grammar, and vocabulary). The language learner should use the correct words in the right order with the correct pronunciation.
- b. Functions (transaction and interaction). The language learner should know when clarity of message is essential (transaction/information exchange) and when precise understanding is not required (interaction/relationship building).
- c. Social and culture rules and norms (turn-taking, rate of speech, length of pauses between speakers, relative roles of participants). The language learner should understand how to take into account who is speaking to whom, in what circumstances, about what, and for what reason.

Furthermore, there are five components which are generally recognized in analyzing speaking. Those are such as:¹⁵

¹⁴Kalayo Hasibuan and M. Fauzan Ansyari, *Op. Cit.*, 2007, p. 113

¹⁵Haris, D.P, *Testing English as a Second Language*, (New York: McGraw Book Company, 1974), p. 81.

a. Pronunciation

Pronunciation includes the segmental features of vowels, consonants, stress, and intonation patterns. Pronunciation is the way of certain sounds is produced. In communication process, one needs to pronounce and to produce the words uttered clearly and correctly in order to miscommunication.

b. Grammar

Grammar remains us how to make the use of words: that is to say, it teaches us how to make the use of them in proper manner, to be to choose the words that ought to be placed. We must be acquainted with certain principles and rules constitute what is collect grammar.

c. Vocabulary

Vocabulary is one of word include in language, have many words that must mastery by who person to speak or writing something. Vocabulary as the acquisition of an adequate vocabulary as essential for successful second language use, because without an extensive vocabulary we will be unable to use the structures and the function that we have learned fir comprehensible communication. It means that vocabulary mastery is one of the important components in communication.

d. Fluency

Fluency is probably best achieved by allowing the air stream of speech to follow then as some of this speech spill over beyond comprehensibility.

e. Comprehension

In brief speaking requires that not only know how to produce specific points of language includes grammar, pronunciation, vocabulary, and fluency, but also to understand the when, why, and in what ways to produce the language.

Based on the explanations above, it can be concluded that the components of speaking skill consists of many aspects such as pronunciation, grammar, vocabulary, fluency and comprehension. In addition, a speaker also should know about the functions that clarity of message and precise understanding. Social culture ruler and norm also should be considered when a speaker wants to speak something.

3. Factors that Influences Speaking Skill

According to Brown, there are some cases in speaking skill, ¹⁶ they are:

a. Clustering

Fluent speech is phrasal, not word by word. Learners can organize their output both cognitively and physically (in breath groups) through such clustering.

¹⁶Brown, H. Douglas, *Ibid.*, p. 256.

b. Redundancy

The speaker has an opportunity to make meaning clearer through the redundancy of language. Learner can capitalize on this feature of spoken language.

c. Reduced Forms

Contraction, elisions, reduced vowels, etc, all from special problem teaching spoken English.

d. Performance Variables

One of the advantages of spoken language is that the process of thinking as you speak allows you to manifest a certain number of performance hesitations, pauses, back tracking, and correction.

e. Colloquial Language

Acquaint the words, idioms and phrases of colloquial language and get practice in producing these forms.

f. Rate of Delivery

Achieve an acceptable speed along with other attributes of fluency.

g. Stress, Rhythm, and Intonation

The stress-timed rhythm of spoken English and its intonation patterns convey important messages.

h. Interaction

Learning to produce waves of language in a vacuum-without interlocutors-would rob speaking skill of its richest component: the creativity of conversational negotiation

In addition, several factors assist in determining whether a child will be a good or poor oral communicator. These factors include reliance on speech, appropriate social use of language, appropriate use of conversational repair strategies, and high levels of speech intelligibility. Positive interactions among these factors appear to produce good oral communicators. For example, individuals who rely on speech demonstrate high levels of speech intelligibility and are rarely poor oral communicators. Poor communicators, on the other hand, rely less on spoken speech, have lower levels of overall speech intelligibility and tend needed to implement communication repair strategies more frequently. When poor communicators fail to use appropriate oral communication and repair strategies, their success in the social use of language is diminished. Global and discrete components of oral communication may be at risk in young children with profound hearing losses and it appears perceptual information from an implant may diminish these risks.¹⁷

Based on the explanation above, there are many factors that influences students' speaking such as clustering, redundancy, reduced forms, performance variables, colloquial language, rate of delivery, stress, rhythm, intonation, and interaction. In addition it is also influenced by reliance on speech, appropriate social use of language, appropriate use of conversational repair strategies, and high levels of speech intelligibility.

¹⁷ Tobey, A. Emily, *et al.*, *Factors Associated with Development of Speech Production Skills in Children Implanted by Age Five*, (USA: Lippincott Williams & Wilkins, 2003), p. 36.

4. Measuring of Students' Speaking Skill

There are five aspects which are generally recognized in analyzing speaking skill such as pronunciation, grammar, vocabulary, fluency and comprehension.

a. Pronunciation.

Pronunciation includes the segmental features of vowels, consonants, stress, and intonation patterns. Pronunciation is the ways of certain sounds are produced. In communication process, one needs to pronounce and to produce the words uttered clearly and correctly in order to miscommunication.¹⁸

b. Grammar

Grammar remains us how to make the use of words: that is to say, it teaches us how to make the use of them in proper manner, to be to choose the words which ought to be placed. We must be acquainted with certain principles and rules constitute what is collect grammar.¹⁹

c. Vocabulary

Vocabulary is one of word include in language, have many words that must mastery by who person to speak or writing something. Vocabulary is the acquisition of an adequate, vocabulary as essential for successful second language use, because without an extensive vocabulary we will be unable to use the structures and the function that

¹⁸Richard, Jack C, *et. al.*, *Language Teaching Applied Linguistics*, (Malaysia,VVP, 1999), p. 297.

¹⁹Nunan, David, *Language Teaching Methodology a Text Book for Teacher*, (New York: Prientice Hall, 1991), p. 296.

we have learned for comprehensible communication. It means that vocabulary mastery is one of the important components in communication.²⁰

d. Fluency

According to Brown, fluency is probably best achieved by allowing the air stream of speech to follow then as some of this speech spill over beyond comprehensibility.²¹

e. Comprehension

In brief speaking requires that not only know how to produce specific points of language includes grammar, pronunciation, vocabulary, and fluency, but also to understand the when, why, and in what ways to produce the language.²²

Based on the explanations above, it can be concluded that the speaking skill can be measured by using speaking components; they are pronunciation, grammar, vocabulary, fluency and comprehension.

C. The Relevant Research

To avoid the same title used in the research, than the writer shows the researches done by the others before, they are:

1. Sumiati (2006) with *the Contribution of Group Work Technique toward The Students' Speaking Ability at the Second Year of Madrasah Aliyah Hidayatul Mubtadiin Bandar Sungai*. After doing

²⁰Nunan, David, *Ibid*, p. 117

²¹Brown, H. Douglas, *Op. Cit*, p. 254

²² Nunan, David, *Op. Cit*, p. 118

the research, she found that the students' speaking ability was categorized less. It can be proved by the average percentage was 53, 65%. While to find out the contribution of group work technique toward the students' speaking ability the null hypothesis is accepted. It can be seen r_{table} is higher than r_{ch} whether r observed is 0, 22 while r table is at 5% significant level is 0, 288 and at 1% significant level is 0, 372.²³

2. Zulkifli (2011) with *Contribution of Group Work Participation toward the Speaking Skill of the Second Year Students at SMAN 1 Bunut Pelalawan*. After analyzing and giving interpretation, he found that, the score of F-test was 16.15 was bigger than F-table at 5% (4.10) and at 1% (7.35). Finally, F-test = 16.15 was higher than F-table. Therefore, it can be interpreted that there was significant contribution of group work participation technique toward speaking skill at the second year students of SMAN 1 Bunut Pelalawan.²⁴

D. Operational Concept

The operational concept is the concept to give explanation about theoretical framework in order to avoid misunderstanding and misinterpretation toward the research. There are two variables used in this research, they are

²³Sumiati, the Contribution of Group Work Technique toward The Students' Speaking Ability at the Second Year of Madrasah Aliyah Hidayatul Mubtadiin Bandar Sungai, (Pekanbaru: UIN SUSKA Riau, Unpublished Thesis, 2006).

²⁴Zulkifli, *Contribution of Group Work Participation toward the Speaking Skill of the Second Year Students at SMAN 1 Bunut Pelalawan*, (Pekanbaru: UIN SUSKA Riau, Unpublished Thesis, 2011).

variable X and variable Y. The using of jigsaw technique is as Variable X that gives the influence on students' speaking ability as variable Y.

Variable X (teaching procedures in using of jigsaw technique)

- a. Teacher divides the students into five groups and every group consists of six students
- b. Teacher asks one student in every group as the group leader
- c. Teacher divides the material/lesson into five segments/sub topics (one for each member)
- d. Teacher assigns the students one segment to be learned
- e. Teacher gives students time to learn their segment at least twice to become familiar with it
- f. Teacher asks the students to present his or her segment to the others groups. Other members are encouraged to ask question for clarification. Then teacher asks the students come back to their jigsaw group.
- g. The teacher observes the process. Intervene if any group is having trouble such as a member being dominating or disruptive.
- h. Teacher gives a quiz at the end to make students realize that the sessions are not just for fun and games, but that they really count.

Variable Y (students' speaking ability)

- a. The students articulate English with correct pronunciation in jigsaw.
- b. The students use appropriate vocabularies in jigsaw.

- c. The students can use rules and certain principle in sentences in proper manner in jigsaw.
- d. The students can express their ideas with fluency and effortless as a native speaker in jigsaw.
- e. The students can express their ideas with best achieved by allowing the air stream of speech to follow then as some of this speech spill over beyond comprehensibility in jigsaw.

E. Assumption and Hypothesis

1. The Assumption

Before constructing the hypothesis, the writer would like to offer assumption that by using jigsaw technique will influence students' speaking ability of the second year at Madrasah Aliyah Darul Ulum Tandun.

2. The Hypothesis

Based on the assumptions above the writer formulates two hypotheses as follows:

Ha: There is a significant influence of jigsaw technique toward students' speaking ability of the Second Year at Madrasah Aliyah Darul Ulum Tandun.

Ho: There is no significant influence of jigsaw technique toward students' speaking ability of the Second Year at Madrasah Aliyah Darul Ulum Tandun.

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

The design of this research is a quasi experimental reserach type pre-test and post-test design. It consists of two groups. They are experimental and control groups. The experimental group is given a treatment. Both of the groups are given pre-test and post test. Post-test score are compared to determine the effectiveness of the treatment.¹ This research consists of two variables; the independent variable symbolized by “X” that is jigsaw technique and the dependent one as “Y” refers to students’ speaking ability. In brief, the research can be designed by following table:

Table III.1
Research Design

Class	Pre-test	Treatment	Post-test
Control	X_1	-	X_2
Experiment	Y_1	T	Y_2

B. Location and Time of the Research

The research was conducted at the second year students of Madrasah Aliyah Darul Ulum Tandun. This research was conducted on March 2012 until finish.

¹Gay, L.R and Peter Airasian, *Educational Research Competencies for Analysis and Application*, (New Jersey: Prentice-Hall. Inc, 2000), p. 392

C. Subject and Object of the Research

The subject of this research was the second year students of Madrasah Aliyah Darul Ulum Tandun, while the object of this research was the students' speaking ability through jigsaw technique.

D. Population and Sample

1. Population of the Research

The population of this research was all the second year students of Madrasah Aliyah Darul Ulum Tandun with the total population are 90 students. It consisted of three classes and every class consisted of 30 students. (documentation data of Madrasah Aliyah Darul Ulum Tandun 2011/2012 academic year). Furthermore, the total of population can be seen from the table below:

Table III.2
The Population the Research

No	Class	The Number of the Students		Total Population
		Male	Female	
1	XIA	14	16	30
2	XIB	15	15	30
3	XIC	16	14	30
Total		45	45	90

Source: (Document of Madrasah Aliyah Darul Ulum Tandun 2011/2012 academic year)

2. Sample of the Research

The sample of this research consisted of two classes, they were class XIB and XIC with the number of students was 60 students. The way in determining the sample by using cluster technique. According to Sugiyono, the cluster technique is used to take sample if the object that will be researched is very wide. To decide which one the population that will be taken as sample, the sample is taken bases on the population that specified. ² Finally, the writer choosed class XIB as experimental class and XIC as control class with the total number of students was 60 students. Furthremore, the Sample of the research can be seen from the table below:

Table III.3
The Sample the Research

No	Class	The Number of the Students		Total Sample	Sample
		Male	Female		
1	XIB	15	15	30	Experimental Class
2	XIC	16	14	30	Control Class
Total		31	29	60	

E. Technique of the Data Collection

The writer used two kinds of instrument in this research, they were observation and test.

1. The observation sheet was used to know the writer activity in teaching speaking by using jigsaw technique. To get data the writer was helped

²Sugiyono, Prof. Dr, *Metode Penelitian Pendidikan*, (Bandung: Alfabeta, 2008), p. 121.

by English teacher at the second year of Madrasah Aliyah Darul Ulum Tandun.

2. Test was used to find out whether there was or not influence of using jigsaw technique toward students' speaking ability. The kind of test was oral. The test consisted of pre-test and post-test. The test was done by giving students some topics and then the students were ordered to make a jigsaw. The writer used the following rating sheet from to analyze students' speaking ability. According to Haris, to measure the students' speaking skill can be used by the following aspects: ³

Table III.4
The Component of Assessing Speaking Skills

Aspects	Score	Requirement
Pronunciation	5	Have a view traces of foreign accent
	4	Always Intelligible, though one conscious of a define
	3	Accent problems necessitate concentrate listening and occasionally lead to miss understanding
	2	Very hard to understanding because of pronunciation problem. Muss frequently be asked to repeat
	1	Pronunciation problems so several as to make speech virtually unintelligible
Grammar	5	Makes few (if any) noticeable error of grammar or word order
	4	Occasionally makes grammatical and/or word-order error, which do not. However, obscure meaning
	3	Make frequently errors of grammar and word order which

³Haris. D.P, *Testing English as a Second Language*, New York: Mc Graw Book Company, 1974.

		occasionally obscure meaning
	2	Grammar and word order errors make comprehension difficult, must often rephrase sentence and or restrict him to basic pattern
	1	Errors and grammar and word order so severe as to make speech virtually unintelligible
Fluency	5	Speech as fluency and effortless as that of a native speaker.
	4	Speed of speech seems to be slightly affected by language problem.
	3	Speed and fluency rather strongly affected by language problem.
	2	Usually hesitant, often only silence by language limitation.
	1	Speech is also halting and fragmentary as to make conversation virtually
Vocabulary	5	Use of vocabulary idiom is virtually that of a native speaker.
	4	Sometimes uses inappropriate terms and/or must rephrase ideas because of lexical inadequacies.
	3	Frequently uses wrong words, compensation somewhat limited because inadequate vocabulary
	2	Misuse of words and very limited vocabulary make comprehension quite difficult
	1	Vocabulary limitation as extreme as to make comprehension vitally impossible
Comprehension	5	Appears to understand very well without difficulty.
	4	Understand nearly everything at normal speech although occasionally repetition may be necessary.
	3	Understanding most of what is said at slower than normal

		speech with repetition.
	2	Has great difficult following what is said. Can comprehend only social conversation, spoken slowly and with frequently repetition.
	1	Cannot be said to understand even simple conversation English

Table III.5
Category and Students' Speaking Score

Range Score	Score	Category
80-100	A	Very Good
70-79	B	Good
60-69	C	Enough
50-59	D	Less
0-49	E	Fail

F. Technique of Data Analysis

In analysing data, the researcher used score of pre-test and post-test of the students. The scores was analysed by using statistical analysis t_{test} , variance, and homogeneity should be found first. Homogeneity test was used to find out whether the two classes have homogenous variance or not. The process to analyse the data as follows:⁴

1. Find out homogeneity test. The formula as follows:

$$f_{\text{calculated}} = \frac{\text{the greater variance}}{\text{the lesser variance}}$$

⁴ Suharsimi Arikunto. *Prosedur Penelitian: Suatu Pendekatan Praktek*. Jakarta: Rineka Cipta, 2006. p. 311

2. Find out the means score of control (M_x) and means score of experiment class (M_y). The formula as follow:

$$M_x = \frac{\sum x}{N} \text{ and } M_y = \frac{\sum y}{N}$$

- Where:
- M_x = Mean score of control class
 - M_y = Mean score of experiment class
 - x = Difference score of control class
 - y = Difference score of experiment class
 - N = Number of students

3. Find out the variance of control class ($\sum x^2$) and the variance of experiment class ($\sum y^2$). The formula as follow:

$$\sum x^2 = \sum x^2 - \frac{(\sum x)^2}{N} \text{ and } \sum y^2 = \sum y^2 - \frac{(\sum y)^2}{N}$$

- Where:
- x^2 = Variance of control class
 - y^2 = Variance of experiment class
 - x = Difference score of control class
 - y = Difference score of experiment class
 - N = Number of students

4. Find out t-test statistic. The formula as follow:

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

Where: t = The t-test statistic
M_x = Mean score of control class
M_y = Mean score of experiment class
x² = Variance of control class
y² = Variance of experiment class
N = Number of students

CHAPTER IV
DATA PRESENTATION AND ANALYSIS

A. Data Presentation

1. Description of the Research Variable

This research consisted of two variables; they were variable X, which referred to the use of jigsaw technique, and variable Y was students' speaking ability at the second year students of Madrasah Aliyah Darul Ulum Tandun. Therefore, X was an independent variable and Y was a dependent variable.

2. Data Presentation

a. Pre-Test of Experiment Class

Table IV.1
Recapitulation of Students' Speaking Ability Score
in Pre-Test of Experiment Class

No	Sample	Score			Category
		Rater I	Rater II	Final Score	
1	Student 01	48	40	44	Fail
2	Student 02	40	40	40	Fail
3	Student 03	44	52	48	Fail
4	Student 04	44	40	42	Fail
5	Student 05	48	44	46	Fail
6	Student 06	44	44	44	Fail
7	Student 07	48	44	46	Fail
8	Student 08	48	52	50	Less
9	Student 09	48	48	48	Fail
10	Student 10	40	44	42	Fail
11	Student 11	40	40	40	Fail

12	Student 12	44	44	44	Fail
13	Student 13	52	56	54	Less
14	Student 14	48	48	48	Fail
15	Student 15	40	40	40	Fail
16	Student 16	44	44	44	Fail
17	Student 17	52	52	52	Less
18	Student 18	52	52	52	Less
19	Student 19	48	48	48	Fail
20	Student 20	52	52	52	Less
21	Student 21	44	44	44	Fail
22	Student 22	40	44	42	Fail
23	Student 23	44	44	44	Fail
24	Student 24	48	48	48	Fail
25	Student 25	40	40	40	Fail
26	Student 26	40	40	40	Fail
27	Student 27	40	44	42	Fail
28	Student 28	40	40	40	Fail
29	Student 29	52	44	48	Fail
30	Student 30	56	48	52	Less
Total		1368	1360	1364	
Average Score		45.60	45.33	45.47	Fail

Based on the table IV.1, it can be seen that the total of students' speaking ability at Rater I was 1368 with average score was 45.60 and Rater II is 1360 with average score was 45.33. Furthermore, final score of students' speaking ability in pre-test of experimental class was 1364 with average score was 45.47 can be categorized fail. In addition, to know the percentage of students' speaking ability score can be seen in the following table:

Table IV.2
Percentage of Students' Speaking Ability Score in Pre-test
of Experiment Class

No	Category	Frequency	Percentage (%)
1	Very Good	0	0
2	Good	0	0
3	Enough	0	0
4	Less	6	20
5	Fail	24	80
Total		30	100

Based on the table IV.2, it can be seen that the total score of students' speaking ability in pre-test can be explained that no one student got very good, good and enough categories, 6 (20%) students got less category and 24 (80%) students got fail category.

b. Pre-Test of Control Class

Table IV.3
Recapitulation of Students' Speaking Ability Score
in Pre-Test of Control Class

No	Sample	Score			Category
		Rater I	Rater II	Final Score	
1	Student 01	48	48	48	Fail
2	Student 02	48	40	44	Fail
3	Student 03	52	44	48	Fail
4	Student 04	40	44	42	Fail
5	Student 05	40	52	46	Fail
6	Student 06	56	52	54	Less
7	Student 07	40	48	44	Fail

8	Student 08	44	48	46	Fail
9	Student 09	52	48	50	Less
10	Student 10	44	44	44	Fail
11	Student 11	40	40	40	Fail
12	Student 12	44	44	44	Fail
13	Student 13	52	56	54	Less
14	Student 14	44	48	46	Fail
15	Student 15	40	40	40	Fail
16	Student 16	44	44	44	Fail
17	Student 17	48	52	50	Less
18	Student 18	52	52	52	Less
19	Student 19	40	48	44	Fail
20	Student 20	52	48	50	Less
21	Student 21	48	44	46	Fail
22	Student 22	40	40	40	Fail
23	Student 23	44	44	44	Fail
24	Student 24	52	48	50	Less
25	Student 25	40	40	40	Fail
26	Student 26	44	40	42	Fail
27	Student 27	52	40	46	Fail
28	Student 28	40	40	40	Fail
29	Student 29	56	48	52	Less
30	Student 30	40	44	42	Fail
Total		1376	1368	1372	
Average Score		45.87	45.60	45.73	Fail

Based on the table IV.3, it can be seen that the total of students' speaking ability at Rater I was 1376 with average score is 45.87 and Rater II was 1368 with

average score was 45.60. Furthermore, final score of students' speaking ability in pre-test of control class was 1372 with average score was 45.75 can be categorized fail. In addition, to know percentage of the students' speaking ability score in all aspects can be seen in the following table:

Table IV.4
Percentage of Students' Speaking Ability in Pre-test
of Control Class

No	Category	Frequency	Percentage (%)
1	Very Good	0	0
2	Good	0	0
3	Enough	0	0
4	Less	8	26.67
5	Fail	22	73.33
Total		30	100

Based on the table IV.4, it can be seen that the total score of students' speaking ability in pre-test of control class can be explained that no one student got very good, good and enough categories, 8 (26.67%) students got less category and 21 (73.33%) students got fail category.

c. Writer's Activity

The data are presented as the result of observation conducted by the writer in the class. English teacher of Madrasah Aliyah Darul Ulum Tandun observed the writer during teaching the students by using jigsaw technique strategy. The writer presents the result of observation in following table:

Table IV.5
The Percentage of Writer's Activity

No	Writer's Activity	Observation							
		I	II	III	IV	V	VI	VII	VIII
1	Teacher divides the students into five groups and every group consists of six students	√	√	√	√	√	√	√	√
2	Teacher asks one student in every group as the group leader	√	√	√	√	√	√	√	√
3	Teacher divides the material/lesson into five segments/sub topics (one for each member)	√	√	√	√	√	√	√	√
4	Teacher assigns the students one segment to be learned	√	√	√	√	√	√	√	√
5	Teacher gives students time to learn their segment at least twice to become familiar with it	√	√	√	√	√	√	√	√
6	Teacher asks the students to present his or her segment to the others groups. Other members are encouraged to ask question for clarification. Then teacher asks the students come back to their jigsaw group	-	-	-	√	√	√	√	√
7	The teacher observes the process. Intervene if any group is having trouble such as a member being dominating or disruptive	√	√	√	√	√	√	√	√
8	Teacher gives a quiz at the end to make students realize that the sessions are not just for fun and games, but that they really count	-	-	-	√	√	√	√	√
Total		6	6	6	8	8	8	8	8
Mean		0.75	0.75	0.75	1	1	1	1	1
Percentage		75	75	75	100	100	100	100	100

$$\text{Means: } \frac{\sum \text{observation score}}{\text{writer's activity}} = \frac{6}{8} = 0.75$$

$$\text{Percentage: } \frac{\sum \text{observation score}}{\text{writer's activity}} \times 100\% = \frac{6}{8} \times 100 = 75\%$$

Based on the table IV.5, the writer has completed all of aspects that have been observed. Every aspect improves from observation I until observation VIII.

In observation I, II and III, the total writer's activity score was 6 (75%), in observation IV, V, VI, VII, and VIII, the total writer's activity score was 8 (100%). This result shows that the writer can use jigsaw technique in teaching speaking well.

d. Post-Test of Experimental Class

Table IV.6
Recapitulation of Students' Speaking Ability Score
in Post-Test of Experimental Class

No	Sample	Score			Category
		Rater I	Rater II	Final Score	
1	Student 01	52	60	56	Less
2	Student 02	52	56	54	Less
3	Student 03	76	60	68	Enough
4	Student 04	60	60	60	Enough
5	Student 05	60	60	60	Enough
6	Student 06	60	60	60	Enough
7	Student 07	52	64	58	Less
8	Student 08	60	60	60	Enough
9	Student 09	56	56	56	Less
10	Student 10	72	64	68	Enough
11	Student 11	60	60	60	Enough
12	Student 12	60	60	60	Enough
13	Student 13	68	60	64	Enough
14	Student 14	72	72	72	Good
15	Student 15	64	64	64	Enough
16	Student 16	56	56	56	Less
17	Student 17	56	56	56	Less
18	Student 18	60	60	60	Enough

19	Student 19	60	60	60	Enough
20	Student 20	60	68	64	Enough
21	Student 21	64	64	64	Enough
22	Student 22	64	64	64	Enough
23	Student 23	64	64	64	Enough
24	Student 24	64	60	62	Enough
25	Student 25	60	60	60	Enough
26	Student 26	60	60	60	Enough
27	Student 27	60	60	60	Enough
28	Student 28	60	60	60	Enough
29	Student 29	68	68	68	Enough
30	Student 30	76	68	72	Good
Total		1856	1844	1850	
Average Score		61.87	61.47	61.67	Enough

Based on the table IV.6, it can be seen that the total of students' speaking ability at Rater I was 1856 with average score was 61.87 and Rater II was 1844 with average score was 61.47. Furthermore, final score of students' speaking ability in post-test of experimental class was 1850 with average score was 61.67 can be categorized enough. In addition, to know percentage of the students' speaking ability score can be seen in the following table:

Table IV.7
Percentage of Students' Speaking Ability in Post-test
of Experimental Class

No	Category	Frequency	Percentage (%)
1	Very Good	0	0
2	Good	2	6.67
3	Enough	22	73.33
4	Less	6	20
5	Fail	0	0
Total		30	100

Based on the table IV.7, it can be seen that the total score of students' speaking ability in post-test of experiment class can be explained that no one student got very good and fail categories, 2 (6.67%) students got good category, 22 (73.33%) students got enough category and 6 (20%) students got less category.

e. Post-Test of Control Class

Table IV.8
Recapitulation of Students' Speaking Ability Score
in Post-Test of Control Class

No	Sample	Score			Category
		Rater I	Rater II	Final Score	
1	Student 01	52	52	52	Less
2	Student 02	40	40	40	Fail
3	Student 03	48	48	48	Fail
4	Student 04	40	40	40	Fail
5	Student 05	48	48	48	Fail
6	Student 06	56	52	54	Less
7	Student 07	52	48	50	Less
8	Student 08	52	48	50	Less

9	Student 09	56	48	52	Less
10	Student 10	52	52	52	Less
11	Student 11	52	52	52	Less
12	Student 12	48	48	48	Fail
13	Student 13	56	56	56	Less
14	Student 14	52	48	50	Less
15	Student 15	52	52	52	Less
16	Student 16	56	56	56	Less
17	Student 17	52	48	50	Less
18	Student 18	48	48	48	Fail
19	Student 19	48	48	48	Fail
20	Student 20	56	56	56	Less
21	Student 21	48	48	48	Fail
22	Student 22	48	48	48	Fail
23	Student 23	56	56	56	Less
24	Student 24	40	40	40	Fail
25	Student 25	52	52	52	Less
26	Student 26	52	48	50	Less
27	Student 27	44	44	44	Fail
28	Student 28	48	44	46	Fail
29	Student 29	52	52	52	Less
30	Student 30	40	40	40	Fail
Total		1496	1460	1478	
Average Score		49.87	48.67	49.27	Fail

Based on the table IV.8, it can be seen that the total of students' speaking ability at Rater I was 1496 with average score was 49.87 and Rater II was 1460 with average score was 48.67. Furthermore, final score of students' speaking

ability in post-test of control class was 1478 with average score was 49.27 can be categorized fail. In addition, to know the students' speaking ability score in all aspects can be seen in the following table:

Table IV.9
Percentage of Students' Speaking Ability Score in Post-test
of Control Class

No	Category	Frequency	Percentage (%)
1	Very Good	0	0
2	Good	0	0
3	Enough	0	0
4	Less	17	56.67
5	Fail	13	43.33
Total		30	100

Based on the table IV.9, it can be seen that the total score of students' speaking ability in post-test of control class can be explained that no one student got very good, good categories and enough categories, 17 (56.67%) students got less categories, and 13 (43.33%) students got fail category.

B. Data Analysis

Table IV.10
Calculated Table of Controlled and Experimental Class

Controlled Class				Experimental Class			
Student	Pre-test	Post-test	Difference	Student	Pre-test	Post-test	Difference
	X_1	X_2	x		Y_1	Y_2	y
01	48	52	4	01	44	56	12
02	44	40	-4	02	40	54	14
03	48	48	0	03	48	68	20
04	42	40	-2	04	42	60	18
05	46	48	2	05	46	60	14
06	54	54	0	06	44	60	16
07	44	50	6	07	46	58	12
08	46	50	4	08	50	60	10
09	50	52	2	09	48	56	8
10	44	52	8	10	42	68	26
11	40	52	12	11	40	60	20
12	44	48	4	12	44	60	16
13	54	56	2	13	54	64	10
14	46	50	4	14	48	72	24
15	40	52	12	15	40	64	24
16	44	56	12	16	44	56	12
17	50	50	0	17	52	56	4
18	52	48	-4	18	52	60	8
19	44	48	4	19	48	60	12
20	50	56	6	20	52	64	12
21	46	48	2	21	44	64	20
22	40	48	8	22	42	64	22
23	44	56	12	23	44	64	20
24	50	40	-10	24	48	62	14
25	40	52	12	25	40	60	20

26	42	50	8	26	40	60	20
27	46	44	-2	27	42	60	18
28	40	46	6	28	40	60	20
29	52	52	0	29	48	68	20
30	42	40	-2	30	52	72	20
$\sum N$ =30	$\sum X_1$ =1372	$\sum X_2$ =1478	$\sum x$ =106	$\sum N$ =30	$\sum Y_1$ =1364	$\sum Y_2$ =1850	$\sum y$ =486

Based on the table 10, it can be found that $\sum N=30$, $\sum X_1=1372$, $\sum X_2=1478$, $\sum x=106$, $\sum Y_1=1364$, $\sum Y_2=1850$, and $\sum y=486$. Furthermore, find out the average score of control (M_x) and average score of experiment class (M_y).

$$M_x = \frac{\sum x}{N}$$

$$= \frac{106}{30}$$

$$M_x = 3.53$$

$$M_y = \frac{\sum y}{N}$$

$$= \frac{486}{30}$$

$$M_y = 16.20$$

Then, finding the variance of control class ($\sum x^2$) and the variance of experiment class ($\sum y^2$) are as follows:

$$\begin{aligned}\sum x^2 &= \sum x^2 - \frac{(\sum x)^2}{N} \\ &= 1260 - \frac{106^2}{30} \\ &= 1260 - \frac{11236}{30} \\ &= 1260 - 374.53\end{aligned}$$

$$\sum x^2 = 885.47$$

$$\begin{aligned}\sum y^2 &= \sum y^2 - \frac{(\sum y)^2}{N} \\ &= 8724 - \frac{486^2}{30} \\ &= 8724 - \frac{236196}{30} \\ &= 8724 - 7873.20\end{aligned}$$

$$\sum y^2 = 850.80$$

Based on the calculation above, it was found that the means score of control class was 3.53 and the variance was 885.47. While the means score of experiment class was 16.20 and the variance was 850.80.

Based on the finding above, there was difference between the experimental class and control class in term of average, and variance. In order to find out the variance homogeneity of both classes, F value can be calculated in the following:

$$f_{\text{calculated}} = \frac{\text{the greater variance}}{\text{the lesser variance}}$$

$$= \frac{885.47}{850.80}$$

$$f_{\text{calculated}} = 1.041$$

The value of $f_{\text{calculated}}$ was compared with the value of f_{table} with dk denominator (30-1=29) and dk counter (30-1=29). Based on the dk dominator 5% is 1.85 and dk counter 1% is 2.41. From the explanation, it was found that $f_{\text{calculated}}$ is lower than f_{table} (1.041<1.85<2.41). Thereby, it can be said that both of groups' variance are homogenous.

Then find out t-test statistic.

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

$$= \frac{3.53 - 16.20}{\sqrt{\left(\frac{885.47 + 850.80}{30 + 30 - 2}\right)\left(\frac{1}{30} + \frac{1}{30}\right)}}$$

$$= \frac{-12.67}{\sqrt{\left(\frac{1736.27}{58}\right)\left(\frac{2}{30}\right)}}$$

$$= \frac{-12.67}{\sqrt{\frac{3472.53}{1740}}}$$

$$= \frac{-12.67}{\sqrt{1.996}}$$

$$= \frac{-12.67}{1.413}$$

$$t = 8.964$$

Based on the data analysis, it can be described that $t_{calculated}$ was 8.964 then to prove whether there is a significant or not, $t_{calculated}$ is turned to $t_{distribution}$ level in alpha decision level (α)0,05 and with the degree freedom 58 ($df = N_1 + N_2 - 2 = 30 + 30 - 2 = 58$). In the degree freedom of 58 was not found in the $t_{distribution}$ so the writer took the nearest degree freedom that was 60. In the degree freedom of 60 was found that $t_{distribution}$ at 5% was 1.671. It can be concluded that $t_{calculated} > t_{distribution}$ (8.964 > 1.671). It average that H_a is accepted and H_o is rejected. In short, there is significant influence of jigsaw technique toward students' speaking ability of the Second Year at Madrasah Aliyah Darul Ulum Tandun.

C. Interpretation of the Data

Based on the data analysis, the researcher find out that the total means score of students' speaking ability of experiment class was 16.20 and control class was 3.53. Based on the calculation of both experimental and control class in the hypothesis testing, it was found that the value of $t_{calculated}$ was higher than $t_{distribution}$ (8.964 > 1.671) in alpha decision level (α)0,05 with the degree freedom ($d.f.$ 60). Consequently, the null hypothesis is rejected. In short, there is significant

influence of jigsaw technique toward students' speaking ability of the Second Year at Madrasah Aliyah Darul Ulum Tandun.

CHAPTER V

CONCLUSION AND SUGGESTION

In this chapter, the researcher would like to draw the conclusion from what have been discussed in the preceding chapters, and to recommend some suggestions concerning with students' speaking ability of the Second Year at Madrasah Aliyah Darul Ulum Tandun by using jigsaw technique.

A. Conclusion

Research findings about using jigsaw technique show that there was significant influence between students who were taught conventional and who were taught by jigsaw technique one. The result shows that the score of t-tes is higher than t-table. Ho is rejected and the Ha is accepted. In other word, jigsaw technique can influence the students' speaking ability of the Second Year at Madrasah Aliyah Darul Ulum Tandun.

B. Implication

The implications of using jigsaw technique are not only for the students but also for the teacher, school and for other researchers. For the students, as explained above, using jigsaw technique could improve the speaking ability and influenced many aspects such as the students' motivation in learning speaking, the students have the opportunity to practice speaking by themselves, the students are able to communicate with their friend in pair, the student can contribute

meaningfully to a discussion and the students are able to develop team work and cooperative working skills.

For the teacher, jigsaw technique could improve the English teachers' knowledge and share experiences in improving the students' speaking ability. For the school, jigsaw technique gave some inputs for Madrasah Aliyah Darul Ulum Tandun especially in reaching percentage of the criteria of minimum passing. For other researchers, jigsaw technique gave any contribution to other researchers to expand further research about improving students' speaking ability by using jigsaw technique.

C. Suggestions

1. Suggestion for the Teacher

The researcher hopes to English teacher to choose the effective strategy to increase students' speaking skill. Related to the result of the research, the researcher offers some suggestions as follow:

- a. Jigsaw technique can give the students chance to apply their skill in speaking. Therefore, the students are able to show their ideas or opinions in speaking. It is suggested that English teacher can adopt and apply this strategy in order to improve the students' speaking skill.
- b. Jigsaw technique provides participants with realistic and relevant contexts in which to test and develop their understanding, knowledge and competence. It is suggested that English teacher can adopt and apply this technique in order to improve the students' speaking skill.

2. Suggestions for the Students

- a. The students should more participate in jigsaw technique to improve their speaking.
- b. The students should articulate English with correct pronunciation in jigsaw technique.
- c. The students should use appropriate vocabularies in jigsaw technique.
- d. The students should use rules and certain principle in sentences in proper manner in jigsaw technique.
- e. The students should express their ideas with fluency and effortless as a native speaker in jigsaw technique.
- f. The students should express their ideas with best achieved by allowing the air stream of speech to follow then as some of this speech spill over beyond comprehensibility in jigsaw technique.

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